LOCAL STATE CAPACITY: AN ANALYSIS OF BUREAUCRACY’ PROFESSIONALIZATION LEVEL AND ITS EFLECTION ON DEVELOPMENT

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ABSTRACT

Purpose: The current Brazilian State, after a context of patrimonialist formation, seeks to mold itself into a bureaucratic model with significant fragments of managerialism. Concerning to the public management efficiency discussion, the article aims to analyze the technical-administrative state capacity and the development of Goiás State municipalities.

Theoretical framework: The theoretical bases for building the concept of state capacity and local development were presented. The articulation of this theoretical framework took place concerning the transition from the patrimonial to the managerial state. Emphasis was placed on historicity and the current conception of the public agent civil and the bureaucratic elements that surround him and, finally, the intersections that underlie the development of the public entity.

Method/design/approach: Data from the Municipality Performance Index and the IBGE Municipal Basic Information Survey were used. The methodological approach was based on cluster analysis, descriptive statistics and Pearson's correlation coefficient.

Results and conclusion: The results showed that the economic data bundling assists typologies creation of homogeneous municipalities for development analysis, highlighting those that are more dependent on the local public administration.

Research implications: It was found that, in a significant number of municipalities, there is a positive correlation between state capacity, professionalization of bureaucracy and development.

Originality/value: The results indicate that greater municipal development can be achieved by improving the technical-administrative state capacity and the public service through the professionalization of the bureaucracy.

Keywords: Local State Capacity, Municipal Development, Bureaucracy, Public Service.

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CAPACIDADE ESTATAAL LOCAL: UMA ANÁLISE DO NÍVEL DE PROFISSIONALIZAÇÃO DA BUROCRACIA E SEU REFLEXO NO DESENVOLVIMENTO

RESUMO

Objetivo: O atual Estado brasileiro, após contexto de formação patrimonialista, busca moldar-se em um modelo burocrático com fragmentos significativos do gerencialismo. Nesta discussão de eficiência da gestão pública, o artigo objetiva analisar a capacidade estatal técnico-administrativa e o desenvolvimento de municípios goianos.

Referencial teórico: Foram apresentadas as bases teóricas na construção do conceito de capacidade estatal e desenvolvimento local. A articulação deste arcabouço teórico deu-se a partir da consideração da transição do Estado patrimonialista para o gerencial. Enfatizou-se a historicidade e a atual concepção do funcionalismo público com o carregamento dos seus elementos burocráticos e, por fim, as intersecções que fundamentam o desenvolvimento do ente público.

Método: Utilizou-se dados do Índice de Desempenho dos Municípios e da Pesquisa de Informações Básicas Municipais do IBGE. A abordagem metodológica fundamentou-se em análise cluster, estatística descritiva e coeficiente de correlação de Pearson.

Resultados e conclusão: Os resultados demonstraram que o agrupamento com dados econômicos auxilia na criação de tipologias de municípios homogêneos para análise de desenvolvimento destacando aqueles que possuem maior dependência da administração pública local.

Implicações da pesquisa: Constatou-se que, em quantidade significativa de municípios, existe correlação positiva entre capacidade estatal, profissionalização da burocracia e desenvolvimento.

Originalidade/valor: Os resultados indicam que um maior desenvolvimento municipal pode ser alcançado com aprimoramento da capacidade estatal técnico-administrativa e do serviço público por meio da profissionalização da burocracia.

Palavras-chave: Capacidade Estatal Local, Desenvolvimento Municipal, Burocracia, Funcionalismo Público.

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1 INTRODUCTION

The alterations to the theoretical marks of apprehension of the State, which gave rise to the bureaucratic State, from 1930, and, afterwards, allied to alterations at broader levels, primed by the alterations in capital, give rise to a New Public Management or, New Public Management. In Brazil, it is manifested by the acunha de Estado manencial [managerial State] (Paes de Paula, 2005) and that, in the face of several initiatives of the federal government, from 1995 onwards, it is also revealed as a fertile field for the analysis of state development, from the point of view of social and political evolution that took place in the same period.

The process of paradigmatic change in the Brazilian state is a disturbed process that does not materialize completely (Paes de Paula, 2005). It is necessary to clarify that the State does not establish itself as a moral entity and supraclasses (Paço-Cunha, 2019), thus, the modifications of the managerial aspects of the State, meet resistance, be it normative, be it cultural, including, enabling contradictory uses of tools and instruments (Benini, Benini & Nemirovsky, 2019).

In the government of Fernando Henrique Cardoso, Bresser-Pereira was appointed to the Ministry of Administration and State Reform - MARE, as Paes de Paula (2005) explains:
In 1994, shortly after being nominated for MARE, Bresser-Pereira traveled to the United Kingdom to study the New Public Administration, investigating both European experiences and the movement "reinventing the government". Upon his return, Bresser-Pereira integrates his studies into the analyzes of the crisis in the Brazilian State, to plan his actions in the ministry. In January 1995, the former minister seized the Master Plan for State Reform. (...) The resulting constitutional amendment, also known as the administrative reform amendment, was promulgated in 1998 and effected the structural changes necessary to legitimize the managerial reform (p. 126).

The Managerial State, as recommended by Luiz Carlos Bresser-Pereira, had the objective of giving priority to control by a posteriori results, greater state autonomy and flexibility, decentralization, accountability, citizen orientation, social participation, transparency and the search for efficiency. The author Ana Paula Paes de Paula (2005) discusses some limits and criticisms of the model established in Brazil, about control, about the orientation of the reform towards the public Serbian, and about its democratic character.

Prior to the process of state reform, the 1988 Federal Constitution established powers for the federal entities, Union, States and Municipalities. The municipalities are, in turn, the spatial nucleus where daily human activities are carried out, they gain a central role in the representativeness of the State. For being the first federative entity to which recourse is made and where contact with implemented public policies takes place. It is crucial to understand how the structure of municipal governments can conceive and be able to implement development policies (Arretche, 1999; Arretche, 2010; Sátyro & Cunha, 2018).

Development in this research is understood as the achievement of social well-being and the quality of life of the population. In fact, the more precise reading of the concept is not strictly associated with economic growth, but with multiple criteria, among which: employment, income, health and education (Medeiros, Santos & Andre, 2018; Oliveira, 2002) and the effectiveness of this concept occurs in the physical and territorial space of the municipality.

In this context of the search for local development, in the face of Brazilian federalism, decentralization aims to meet local and regional needs through specific development strategies. Arretche (2001) points out that, in spite of the differences in administrative capacities, municipalities must organize themselves in such a way as to offer public services with a defined standard, whether by the state entity or by the Union.

The different capacities of municipalities, states and the Union are research topics at the present time, as demonstrated, for example, by Aguiar and Lima (2019), in a study on concepts, measurement and qualification of state capacity. Pereira and others (2019), point out that there is a dispute over concepts on the theme, but, generally speaking, the state capacity would be conceptualized as the set of characteristics of the state apparatus that make its intervention effective. The skills, competencies and resources would be for Wu, Ramesh and Howllett (2015), key points of the concept. Pires, Lotta and Oliveira (2018), also cite the issue of autonomy as a key point to understand state capacity and performance. Pires and Gomide (2016) point out that the capacity would also involve the relations between implementing bureaucracy and control.

This ability to promote change and intervene in reality, through the implementation of public policies, is an important challenge for the federated entities (Sátyro, Cunha & Campos, 2016; Petean & Sauer, 2019). Thus, understanding to what extent the professionalization of bureaucracy and bureaucratic control results in development, gains relevance for the evaluation and planning of municipalities. The research question is thus summed up: What is the relationship between the technical-administrative state capacity and the development of Goan municipalities? It converges, in such a way, to the need to understand the relations between the structure of state capacity, bureaucratic control and the potential for effecting municipal development. In summary, the main purpose of this research is to examine the relationship
between state technical-administrative (bureaucratic) capacity and the development of municipalities.

The investigation of the administrative capacity of municipalities and their structure therefore collaborates to understand how the political autonomy of management of these entities is qualified and related to the capacity to promote development. In this context, this article contributes to the area of public administration, presenting practical and managerial implications. The main contributions of the work can be summarized below:

- Presents original results related to the state capacity of municipalities, through statistical analysis for grouping of municipalities in Goiás and comparing indicators related to servers and municipal development;
- Identifies suggestions for future studies related to the importance of professionalizing bureaucracy and the role of the effective statutory framework in this context; and,
- The paper is finalized presenting implications for the academic and practical community in the field of public administration.

2 PUBLIC OFFICIALS AND STATE CAPACITY

According to Bresser-Pereira (2008), the Brazilian state, at the beginning of the 20th century, was oligarchic and patrimonial, within an agricultural mercantile economy and a class society barely out of slavery. The transition from patrimonialist to managerial state was marked by contradictions, see for example the publications on labor work (Petean, Benini & Nemirovsky, 2021; Vieira & Ghizoni, 2020.). As Paes de Paula (2005, p. 81) "the new public administration tends to maintain the dichotomy between public administration and politics, since it did not transport the socio-political dimension of discourse to practice".

After the return of the country to democratic rule in 1985, and with the formulation of the Brazilian Constitution of 1988, the legal regime of employees became unique in the Union, and in each level of the federation (Spina, 2021). The new guidelines of the public administration, which had been implanted in the country since 1967, were more than ignored, destroyed, while the bureaucracy took advantage to establish privileges for itself (Bresser-Pereira, 2001). However, Bresser-Pereira (2015) points out a great merit of the 1988 Constitution: the requirement of a public tender for entry into the public service, thus substantially reducing the employment that traditionally characterized the patrimonialist state.

According to Motta (2004), the constitutional requirement of access to public posts and jobs through public competitions pays homage to several principles dear to democracy: isonomy, efficiency and impersonality. Relating the public tender institute to state efficiency, Meirelles (2006, p. 434) teaches:

The competition is the technical means put at the disposal of the Public Administration to obtain morality, efficiency and improvement of the public service and, at the same time, to provide equal opportunity to all interested parties who meet the requirements of the law, fixed according to the nature and complexity of the positions or jobs, as determined by Article 37, II of the CF. The competition is therefore aimed at removing the inept and the trapped, who usually crowd the offices, in a degrading spectacle of protectionism and a lack of scruples from politicians who rise up and stay in power auctioning off public posts and jobs.

In the management of private companies, the benefits and possibilities are unrestricted as Shrivastava points out (2022). Damo e Silva's work presents the difference of generations and their relationship with work. In public service, the demands are distinct and the benefits try to follow the subjective role (Magnin, Faria & Petean, 2022). Among the objective benefits of public service is the right to stability (Ferreira, Ferraz, Paiva & Rebouças, 2020).
Conceptualized from the public servant not be disconnected from the public service unless, by virtue of the final judicial judgment, administrative process or periodic evaluation of performance, ensuring broad defense in all cases. The doctrinal definitions strictly follow the terms of Article 41 of the Federal Constitution, in the wording given by Constitutional Amendment No. 19/98, which fixed the period of three years probationary period for the acquisition of this subjective right, after the special evaluation of performance by commission established for this purpose (Constitution of Brazil, 1988).

However, in spite of the progress related to the institution of the public tender as the main form of selection of the servers, it should be noted that the possibility of appointment of servers in commissioned positions - those filled on the basis of trust, being therefore called commission positions, of free filling and dismissal ad nutum (Meirelles, 2006).

In short, the bureaucratic setback that occurred in the country between 1985 and 1989, was a reaction to cronyism that dominated the country in those years, but, as well, it was an affirmation of corporatist and patrimonialist privileges incompatible with the bureaucratic ethos. The result was the lack of prestige of the Brazilian public administration, in spite of the fact that the latter is made up mostly of competent, honest professionals with a public spirit (Meirelles, 2006).

For Bresser-Pereira (2008), after redemocratization, specifically in the public administration, the attempts at reform of the Collor government were wrong, confusing reform of the State with cutting of employees, reduction of real salaries, decrease of the size of the State. At the beginning of the Itamar Franco government, Brazilian society began to realize the crisis in public administration, opening itself up to the managerial reform of the State.

According to Bresser-Pereira (2001), modern states have three sectors: the sector of exclusive activities of the State, within which the strategic nucleus and the executive and/or regulatory agencies are located; social and scientific services, which are not exclusive but which, given the externalities and the human rights involved, more than they justify, demand strong financing from the State; and, finally, the sector of production of goods and services for the market. Thus, three new organizational institutions emerged from the reform: regulatory agencies, executive agencies and social organizations.

For Molinaro (2004), one can see a thesis underlying the reform agenda. The Brazilian Constitution of 1988, by treating all employees equally, without considering their specificities, brought enormous difficulties for the organization of the sector, jeopardizing the efficiency and effectiveness of the activities carried out by the Brazilian State, making it necessary, therefore, to reform it, such as, for example, the adoption of the Single Legal Regime (RJU, Law 8112/90) and the extinction of the figure of the Public Private Law Foundations (FPDP), a fact that, suddenly, transformed thousands of employees of the FPDP into statutory servers. The promulgation of the Constitutional Amendment 19, of June 1998, therefore, would go on to consolidate important changes in this framework that would affect the functioning of the public administration with a view to controlling spending and balancing public accounts.

Major changes were also made in the form of remuneration for positions of trust, in the way of recruiting, selecting and remunerating state careers. An attempt to balance the capitalist economy (Stefano et al., 2020) or in the words of Behring (2023) the advance of the state counter-reform. By the constitutional amendment, the labor regime of the civil servants ceased to be unique; consequently, in 1999, the law defining, alongside the statutory regime, the public employment regime was approved. Even before the approval of the amendment, though, major changes had been introduced between 1976 and 1978 in the rules that govern the work regime of statutory servants.

But it was only possible to approve the new institutions after a national debate, in which the bureaucratic culture, hitherto dominant, was submitted to systematic criticism, at the same time that the new institutions were defended, particularly the breaking of the total stability enjoyed by the servants in the 1988 Constitution, and the idea of transforming the social and
scientific services rendered by the State into social organizations, that is, into non-state public organizations financed by the State budget and supervised by means of management contracts.

In the bureaucratic state model, the institute of public tender is evidenced as the main form of provision of public office, in contrast to the patrimonialist model. With the Managerial Reform, new forms of civil service selection have been adopted (Spina, 2021). Regarding the classification discussed here, Câmara (2009), in an interesting study about the positions of free provision, characteristic of the managerial State models, explains:

Formally, as regards the type of service, posts in the Union civil service are classified as: actual or in committee, with the first dependent on qualifications in competition and the second not. Direct management posts classified as commission-based are two groups: the group called senior management and advisory, which is subdivided into two categories, senior management and advisory and senior advisory; and the group called special-purpose positions. The first group comprises "the activities of finance, covering planning, supervision, coordination, guidance and control, at the highest level of the hierarchy of the organs of direct federal administration" (Câmara, 2009, p. 644).

Nevertheless, one can see an apparent contradiction between the institutes, since the public tender is the very instrument of the bureaucratic State, and the position in commission - or position of trust -, a form of provisioning that is accustomed to the managerial State, but which has a reminiscence with the outdated patrimonialist model, where fiducia was at the center of the choice of the functional body of the State.

The relationship between the state and functionalism directly impacts on state capacity. The concept of state capacity (or of constituted public administration) found in Gomide, Pereira and Machado (2018) is based on the structure proposed by Weber: specialization of functions, meritocracy, formalism, hierarchy and impersonality. In addition, these typologies were implemented as a set of tools, tools and resources that certain public managers appropriate to set objectives, transforming them into functional performance policies (Marenco, 2017).

Pires (2009) corroborates this concept by associating this "capacity" with the competence in designing, implementing and coordinating strategies. Nunes (2018), for example, studied the bureaucratic and political capacity to implement national development strategies in the years 2003 to 2010. Such characterization about the capacity of the public machine and development policies permeates the state-society relationship (Gomes, 2016; Gaitán & Boschi, 2016).

The question that thus imposes itself is about the attributes of the State that make a difference in the implementation of public policies and how to create mechanisms capable of making the power of the State viable and making it materialize its products and services (formulation and implementation of public policies), an example of public policy implemented in the perspective of inducing state are to be found in Lucena (2022). There is circularity between the means necessary for the provision of state capacity (coercion, laws and administrative bureaucracy) with the effects produced by its availability (Cingolani, 2013).

When recalling the bureaucratic ideal, this capacity is linked to resources and formal control. And in the context of public administration, which also has a political bias in its practice, an important characteristic feature of the capacity of the State would be the bureaucratic careers that prevail even under high political uncertainty, unpredictability and/or instability in the governmental succession (Marenco, Strohschoen, & Joner, 2017).

The State capacity and its efficiency therefore permeates the composition of the staff of the direct administration. Batista (2015) indicates that a lower number of failures and irregularities in the implementation of resources would be correlated to a greater number of servers per inhabitant. In the same tuning fork, Souza (2017) associated the concept of state capacity with the professionalization of bureaucracy. Marenco, Strohschoen and Joner (2017),
conclude that there is in this plot of state capacity the relationship between development and quality of bureaucracy.

3 METHOD

Given the above, the methodology of the work is based on examining the relationship between the state technical-administrative capacity (civil service) and the development of municipalities in Goiás. This relationship will be examined based on the characteristics of the state's capacity, materialized in this research by indicators of the number of public administration employees, the level of schooling of these employees and the development of the municipalities. With regard to the research process, a quantitative approach to data was used. This is a descriptive-analytical study composed of the steps: data collection, treatment, analysis and interpretation of secondary data. A Erro! Fonte de referência não encontrada. summarizes the methodological steps undertaken.

First a clustering technique was performed (Hair, Anderson, Tatham, & Black, 2006) to group municipalities of similar profile (Bezerra & Gomes, 2020), then indicators to assess state capacity were identified and organized in a database. Finally, descriptive statistics were used to analyze the results. The following topics detail the method.

3.1 Grouping of municipalities

The analysis of groupings allows the formation of clusters using a multivariate model, from a group of variables (Bezerra & Gomes, 2020; Braga & Campos, 2022). These groups (or clusters) are formed in such a way as to ensure a certain homogeneity internally and heterogeneity when compared to other groups of individuals or observations (Fávero & Belfiore, 2017) - municipalities, in the present study.

In this work, the intention of using the grouping of municipalities is justified by the intention of evaluating the development index of municipalities of the state of Goiás, which by itself presents a great variety of socioeconomic characteristics. The use of the cluster technique is recurrent in the literature as a way to mitigate the disparities between the municipalities to be analyzed by reducing the influence of some variables (Tristan, 2003; Oliveira & Liboni, 2019). Thus, in order to reduce the influence of the economic dimension of the MDI on the analysis and on the correlation with the state technical capacity (servers), it was sought to use variables such as to indicate the economic profile of the cities.
To this end, the \textit{k-means} method was chosen, which is considered to be a non-hierarchical method. The use of R software was used to perform multiple analyzes with different numbers of groupings, in order to choose the best fit to the data set, such as Hair \textit{et al.} (2006) advise. The variables chosen for the grouping follow the influence of the proposed segmentation SEGPLAN (2011) and the work of Romanatto, Ariel and Silva (2014), as shown in Figure 2:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source</th>
<th>\textit{Returns TRUE on success or FALSE on failure.}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross added value of livestock farming</td>
<td>Gross Added Value (GVA) is the value that each sector of the economy (farming, industry and services) adds to the final value of everything that was produced in the municipality.</td>
<td>Data series of Gross Domestic Product of Municipalities - IBGE.</td>
</tr>
<tr>
<td>Gross added value of industry</td>
<td>Taxes, fees and contributions levied on goods and services when they are produced or imported, distributed, sold, transferred, or otherwise made available by their owners, less subsidies.</td>
<td></td>
</tr>
<tr>
<td>Gross added value of services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross added value of public administration, defense, education and health and social security</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxes, net of subsidies, on products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP per capita</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textbf{Figure 2.} Description of variables: grouping of municipalities. \textbf{Source:} Prepared by the authors from data from IBGE (2023)

### 3.2 State Capacity Analysis Variables

After the cluster stage, the State Capacity analysis was performed. The survey data were collected in January 2022 from the website of the Goiás Statistical Database implemented by the Mauro Borges Institute of Socioeconomic Statistics and Studies and the Brazilian Institute of Geography and Statistics. Figure 3 shows the variables of the study.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Acronym</th>
<th>\textit{Returns TRUE on success or FALSE on failure.}</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct government servers per 1000 inhabitants</td>
<td>S_{ad_{1000}}</td>
<td>Number of direct administration (municipal) servers proportional to 1000 inhabitants.</td>
<td>Calculated from Municipal Basic Information Survey data - MUNIC 2018 and IBGE population estimates</td>
</tr>
<tr>
<td>Statutory Servers per 1000 inhabitants</td>
<td>S_{est_{1000}}</td>
<td>Number of statutory servers of direct administration (municipal) proportional to 1000 inhabitants.</td>
<td></td>
</tr>
<tr>
<td>Servers Commissioned by 1000 inhabitants</td>
<td>S_{com_{1000}}</td>
<td>Number of servers commissioned from direct administration (municipal) proportional to</td>
<td></td>
</tr>
</tbody>
</table>
In the data pre-processing stage, incomplete or missing observations were excluded. Thus, for the influence analysis of the number of servers, of the total of 246 municipalities, 245 valid observations were obtained for the study variables S_ad1000, S_est1000 and S_com1000 (the municipality of Montes Claros de Goiás did not present complete data). For the analysis of the influence of the level of schooling of the civil servants, only 141 municipalities presented complete information.

The independent variables were obtained from the data of the Municipal Basic Information Survey of the IBGE (MUNIC-IBGE Base 2018). The variables representative of the state capacity chosen were: number of staff in direct administration (commissioned and statutory servers) and level of education of the direct administration servers.

The indicator of density of civil service (number of statutes and commissioners for each thousand inhabitants) is representative of the state's capacity as regards the resource of personnel and meritocratic aspects of entering the public service - aspects of professionalization and rationalization of the state (Fukuyama, 2013; Pereira et al., 2019). Functionalism data are important indicators of state capacity to implement public policies as pointed out by Batista (2015) and Marenco, Strohschoen and Joner (2017).

It should be noted that the municipal development index used was the IDM - Municipal Performance Index that is prepared by the IMB - Mauro Borges Institute of Socioeconomic Statistics and Studies. The MDI values take measures from 0 to 10 and for their calculation 37 indicators are used grouped in six dimensions: Economy (7), Labor (4), Education (9), Security (5), Infrastructure (4) and Health (8). IDM is a biannual indicator and has the advantage of being disseminated biannually and in intercensorial years (Cruvinel, Marinho, & Satel, 2021).

3.3 Data Analysis Methods

For the first part of the method (Cluster Analysis), the results obtained were presented in the format of tables and maps made on the basis of the R project. Then there is the second stage, which aims to discuss the relationship between the technical-administrative state capacity (civil service) and the development of municipalities in Goiás, opting for the use of descriptive statistics by analyzing measures of position and dispersion of the data (average, median and coefficient of variation).

In addition, to understand the relationship between the variables of the study, Pearson's correlation coefficient was used. The coefficient demonstrates how to determine the correlation between variables ranging from -1 to 1. The sign indicates the positive or negative relationship and the value suggests the strength of the relationship. This coefficient is used in a variety of studies that investigate regional development, such as those that analyze fiscal responsibility
and public spending (Cajazeira & Jorge, 2015; Barroso, Pereira, Silva, Bresciani & Prearo, 2022), demographic and socioeconomic indicators (Söthe, Visentini & Kegel, 2018; Lima & Todeschini, 2019) and the contribution of resources (Passos, 2020).

4 RESULTS AND DISCUSSIONS

The segmentation map of the state of Goiás in 5 clusters is shown in Figure 4. Such a number of clusters was reached from the analysis of an optimal number of clusters, considering the specificities of the results and the advice of Elbow, Silhouette and GAP methods (Hair et al., 2006).

![Figure 4. Cluster Map](image)

**Source:** Prepared by the authors (2023)

The general characteristics of the groups are presented in Table 3 (each grouping is identified with a name and acronym of the activities with the highest gross value added). The 1-Serv-com-ind group is made up of two municipalities and is characterized by the services sector, trade and industry, has the third largest contribution with the state GDP and the fourth largest GDP per capita. The state capital appears alone in the 4-Capital group. The 3-Serv-agri-ind group is third in number of municipalities and stands out for services, agriculture and industry with the second highest GDP per capita. The 5-Agr-ind group is the second largest in number of municipalities, having high average GDP per capita, but with the lowest population quotas. Group 2-AdmPubli has the majority of municipalities in the state (88%), but with the second lowest population average and corresponding to 40% of the state GDP with the lowest GDP per capita and marked by the activities of administration, defense, education and public health, social security and services.
The overall MDI values are shown in Figure 5. The indicator ranges from 3.9 to 6.5 with an average of 5.0 and a coefficient of variation of 7.8%. The workforce distribution of the servers appears to be uneven in the state, as shown in the characterization of the server density variables shown in Figure 7. In the 5-Agri-ind cluster, not only the highest GDP per capita is concentrated (see Figure 6), but also the highest number of servers in all categories.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>1-Serv-with-yet</th>
<th>2-AdmPubli</th>
<th>3-Serv-Agr-ind</th>
<th>4- Capital</th>
<th>5-Agri-ind</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipalities</td>
<td>2 municipalities (Aparecida de Goiânia and Anápolis)</td>
<td>217 municipalities</td>
<td>5 municipalities</td>
<td>1 municipality (Goiânia)</td>
<td>20 municipalities</td>
</tr>
<tr>
<td>Mean population</td>
<td>473,964</td>
<td>17,114</td>
<td>111,824</td>
<td>1,495,705</td>
<td>9,826</td>
</tr>
<tr>
<td>Percentage of the state population</td>
<td>14%</td>
<td>54%</td>
<td>8%</td>
<td>22%</td>
<td>3%</td>
</tr>
<tr>
<td>Average GDP per capita</td>
<td>R$30,358</td>
<td>R$22,386</td>
<td>R$44,961</td>
<td>R$33,004</td>
<td>R$86,098</td>
</tr>
<tr>
<td>Percentage of state GDP</td>
<td>14%</td>
<td>40%</td>
<td>13%</td>
<td>25%</td>
<td>7%</td>
</tr>
<tr>
<td>Activities with the highest gross value added</td>
<td>Services, Trade and Industry</td>
<td>Public Administration, Defense, Education and Health, Social Security and Services</td>
<td>Services, Agriculture and Industry</td>
<td>Services and Trade</td>
<td>Agriculture and Industry</td>
</tr>
</tbody>
</table>

Figure 6. Characterization of clusters. Source: Prepared by the authors (2023)

Still, the group has the same average IDM (and similar median) as the 3-Serv-agri-ind group, which has lower server density per 1000 inhabitants. A factor that calls attention is the...
discrepancy in the distribution of the number of servers in all categories, verified by the coefficient of variation (CV) values. Considering the data of the state of Goiás as a whole, it is possible to understand the inequality between regions and municipalities regarding the technical-administrative state capacity. The CV of 89.2% for the variable $S_{com1000}$ indicates how there are different realities as regards those commissioned in the state.

<table>
<thead>
<tr>
<th></th>
<th>State of Goiás</th>
<th>1-Serv-with-yet</th>
<th>2-AdmPubli</th>
<th>3-Serv-Agrí-ind</th>
<th>4- Capital</th>
<th>5-Agrí-ind</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IDM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>5.0</td>
<td>5.1</td>
<td>5.0</td>
<td>5.4</td>
<td>6.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Median</td>
<td>5.0</td>
<td>5.1</td>
<td>5.0</td>
<td>5.4</td>
<td>6.1</td>
<td>5.3</td>
</tr>
<tr>
<td>CV</td>
<td>7.8%</td>
<td>2.9%</td>
<td>7.3%</td>
<td>4.0%</td>
<td>-</td>
<td>7.5%</td>
</tr>
<tr>
<td><strong>S_ad1000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>58.7</td>
<td>22.3</td>
<td>58.2</td>
<td>27.2</td>
<td>24.0</td>
<td>77.6</td>
</tr>
<tr>
<td>Median</td>
<td>51.3</td>
<td>22.3</td>
<td>51.3</td>
<td>28.6</td>
<td>24.0</td>
<td>72.7</td>
</tr>
<tr>
<td>CV</td>
<td>52.9%</td>
<td>9.1%</td>
<td>51.9%</td>
<td>38.4%</td>
<td>-</td>
<td>42.7%</td>
</tr>
<tr>
<td><strong>S_est1000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>36.2</td>
<td>15.9</td>
<td>36.1</td>
<td>16.6</td>
<td>20.8</td>
<td>45.2</td>
</tr>
<tr>
<td>Median</td>
<td>31.8</td>
<td>15.9</td>
<td>31.8</td>
<td>19.4</td>
<td>20.8</td>
<td>42.5</td>
</tr>
<tr>
<td>CV</td>
<td>55.9%</td>
<td>20.5%</td>
<td>55.4%</td>
<td>42.6%</td>
<td>-</td>
<td>46.5%</td>
</tr>
<tr>
<td><strong>S_com1000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>14.5</td>
<td>4.7</td>
<td>14.1</td>
<td>6.4</td>
<td>0.6</td>
<td>22.7</td>
</tr>
<tr>
<td>Median</td>
<td>11.0</td>
<td>4.7</td>
<td>11.0</td>
<td>6.4</td>
<td>0.6</td>
<td>17.1</td>
</tr>
<tr>
<td>CV</td>
<td>89.2%</td>
<td>49.4%</td>
<td>79.1%</td>
<td>46.4%</td>
<td>-</td>
<td>107.7%</td>
</tr>
</tbody>
</table>

**Figure 7.** Description of clusters for server quantitative x IDM analysis.  
**Source:** Prepared by the authors (2023)

Figure 8 shows the number of municipalities in the clusters, taking into consideration only those that informed complete data for the IBGE Municipal Basic Research as to the level of schooling of the servers. From the above, it is clear that many municipalities did not know how to inform and therefore do not have a means of controlling such information (only 57.3% of the municipalities of the state reported the complete data).

Among groups and within groups, there is a divergence in the number of servers, but the average MDI varies little when comparing the CV. Unlike this data, and in the same measure as for some data from Table 4 servers, Table 5 shows high CVs, indicating that not only the quantitative, but the technical qualification, expressed in schooling, has great variability between and within groups. Generally speaking, the groups show a greater concentration of employees at the levels of schooling with high school and higher education.
Local State Capacity: an Analysis of Bureaucracy’ Professionalization Level and its Effect on Development

Figure 8. Description of clusters for server education level analysis.
Source: Prepared by the authors (2023)

The results of the descriptive analysis demonstrated differences in the number of servers and in the levels of schooling, as well as in the MDI values. Table 1 demonstrates the correlations for analyzing server numbers per thousand inhabitants and IDM. Only those groups 2-AdmPubli, 3-Serv-agri-ind and 5-Agri-ind that had a number of observations indicating correlation without sampling bias were analyzed.

Table 1 - Correlation Coefficient of Clusters for Server Quantitative vs. IDM Analysis

<table>
<thead>
<tr>
<th></th>
<th>2 - AdmPublic</th>
<th>3-Serv-agri-ind</th>
<th>5-Agri-ind</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_ad1000</td>
<td>0.028859</td>
<td>-0.19336</td>
<td>-0.31011</td>
</tr>
<tr>
<td>S_est1000</td>
<td>0.066624</td>
<td>-0.18822</td>
<td>-0.09457</td>
</tr>
<tr>
<td>S_com1000</td>
<td>-0.01852</td>
<td>-0.08328</td>
<td>-0.37916</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors (2023)

It is verified that for the cluster 2-AdmPubli, which has as its main activity the administration, there is a positive correlation between the total density of servers of the direct administration and the municipal development indicator. The number of statutory servers is more strongly correlated than the total number of servers and the number of commissioned servers has been negatively correlated with the indicator.

Different behavior is noted for groups 3-Serv-agri-ind and 5-Agri-ind, whose socioeconomic profile is services, agriculture, and industry. The 5-Agri-ind cluster showed the strongest negative correlation between IDM and quantitative of servers. This cluster has a higher average number of servers indicating possible overquota or demonstrating that functionalism does not influence the implementation of municipal development in a linear way. Interestingly, the number of servers commissioned in this group presented the worst correlation value, demonstrating that not necessarily more commissioned servers assist in the implementation of public policies that lead to the development of municipalities.

Table 2 presents the correlation results for the level of education of the servers and IDM (only groupings 2 and 5 are presented due to insufficient complete data from the Municipal Basic Survey - MUNIC of the IBGE for the municipalities of grouping 3). The level of technical capacity again shows that the results for the 5-Agri-ind cluster sound disagreeable as it indicates a decrease in municipal development compared to a higher number of servers with high school or higher education (same standard in Table 6). Interesting correlation was obtained with the...
servers with graduate level. It is strange, however, that Pearson's correlation is also positive with the number of uneducated or elementary school (full or incomplete) servers.

Table 2 - Correlation coefficient of clusters for IDM analysis x level of education of servers

<table>
<thead>
<tr>
<th></th>
<th>S_ad_si1000 (PHP 3 = 3.0.6, PHP 4)</th>
<th>S_ad_em1000</th>
<th>S_ad_es1000 (PHP 4 = 4.0.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-AdminPubli</td>
<td>0.041252</td>
<td>0.026517</td>
<td>-0.04148</td>
</tr>
<tr>
<td>5-Agric-ind</td>
<td>0.392458</td>
<td>0.307142</td>
<td>0.279666</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors (2023)

The cluster 2-AdminPubli presents, differently, a positive correlation between IDM and the larger numbers of servers with full secondary and higher education. The correlation is even greater than in the case of functionalism without instruction or with fundamental. It differs, in an unexpected way, from the negative relationship between servers with postgraduate studies and the indicator of development.

5 FINAL CONSIDERATIONS

In a global analysis, the results showed that it is possible to group and offer a typology of municipalities in Goiás to specify certain analyses such as the municipal development. The clusters indicated profiles of municipalities that differ as to main activities (considering gross added value), GDP per capita, population and participation in the state GDP. It is important to emphasize that regionalization in homogeneous groupings can provide contributory analyzes to foster local development, formation of consortia of municipalities (Leão, Bastos & Ribeiro, 2022) and adopt measures for implementation and/or reformulation of public policies as indicated in the work of Monsueto, Carrijo e Moraes (2020) and Paschoalotto, Passador, Passador e Endo (2022).

In addition, the economic grouping managed to capture some of the trends of the MDI indicator, notably by assessing the CV and average values in each group. The groupings also highlighted the inequality of state technical-administrative capacity in terms of the number of staff and the level of training. From this, new reflections can be built on the quest for a less patrimonial, more bureaucratic state (in the original meaning of the word) and which aims to be managerial considering, for example, the number of commissioned civil servants that in some groupings reach to represent, on average, 50% of the civil service.

The analysis of development and correlation with the groups defined in the study showed that, for most municipalities, there is in fact a positive relationship between the density of servers and their training. This is evidenced in the analyzes carried out for the 2-AdminPubli cluster, made up of 88% of the municipalities, and where one notices a dependency for the gross added value of the areas of administration, defense, education and public health and social security. From this point, the question may arise about the necessary State and Public Service. The dependent group finds in the civil service important economic factor, as well as a promoter of development.

The dialog with the literature indicates that the research points a path towards analyzes and findings on the professionalization of bureaucracy and importance of relying on effective statutory framework as indicated, for example, Marenco (2017) and Cardoso and Marenco (2019).

Research has also shown that there is to some extent a correlation between state capacity and municipal development. In any event, the results indicate that the ‘installed’ state capacity does not, in itself, provide an indicator capable of unequivocally influencing development. There is, at some level, an influence, but one that disregards the efficiency and effectiveness of
this installed state and bureaucratic capacity. In other words, the installed capacity is necessary for development, but it is not sufficient. In this sense, a practical implication of this work is the role of public managers in building mechanisms suited to their local realities of servers and professionalization, in order to favor the efficiency and effectiveness of their actions.

Based on this empirical finding, the results of this work also generate theoretical developments. Future research paths may move in the direction of identifying explanatory factors for development, theoretical supports for the conception of the State as promoter of local development and its relations with society.

The work presents a limitation as to the data available for analysis due to the insufficiency of complete data from the Municipal Basic Information Survey, as well as, by using proxy performance variables (due to the methodology of calculating the IDM) and the challenges of measuring state capacity as also indicated by Aguiar and Lima (2019). It is also understandable that local development is not the sole and exclusive response of the action of a single agent, but is the result of several actors (whether from public administration or not). This fact leaves open questions such as that the state action, through the public servants, was not the main cause (exclusively) of the municipal development).

Issues arising from labor limitations and others arising from the results presented here are opportunities for future work such as: the investigation of the concept of formal "installed" state capacity versus "realizable" state capacity as an indicator of income or state potential; comparative studies with other variables for grouping or regionalization and other indicators of state capacity. Another approach for future work is the study of the adoption of statistical techniques capable of capturing the effect of time throughout the development process, such as, for example, the use of data in a panel. There is also room for studies that assess the impact of public human resources policies on the public sector, comparing their results before and after implementation, through studies of "Differences in Differences" (Diff in Diff).

REFERENCES


