Behavior and performance of street-level bureaucrats: a study at the Federal Highway Police

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The literature on Street-Level Bureaucracy (SLB) points to several behavioral motivators that influence their performance, such as Discretion, Self-interest, Norms, and Public Interest. Although these aspects occur simultaneously, there are no studies on which behavioral motivators are decisive for the performance of SLB. This research aims to analyze the influence of the interaction of different behavioral motivators of the SLB in their performance in implementing public policies. To achieve the proposed objective, a structured questionnaire was applied to 10,014 Federal Highway Police officers active during the research period, with 426 respondents. Data were analyzed using structural equation analysis. The results showed that Discretion, Norms, and Public Interest were positively associated with Operating Performance. For Institutional Performance, only the Norms and Public Interest dimensions were positively associated. The results indicate that the relevance of the different behavioral motivators of the SLB varies according to the performance variable observed and reiterate the asymmetry of perceptions between the different organizational levels.

Keywords: street-level bureaucrats; police; performance.

Comportamento e desempenho de burocratas de nível de rua: um estudo na Polícia Rodoviária Federal

A literatura sobre Burocratas de Nível de Rua (BNR) indica diversos motivadores do comportamento que influenciam o desempenho desses profissionais, como discricionariedade, autointeresse, normas e interesse público. Apesar de esses aspectos ocorrerem de maneira simultânea, não se verificam estudos sobre quais agentes do comportamento são determinantes para o desempenho dos BNR. A presente pesquisa tem por objetivo analisar a influência da interação de diferentes motivadores do comportamento do BNR em seu desempenho para implementar políticas públicas. Para isso, foi aplicado um questionário estruturado a 10.014 policiais rodoviários.
federais ativos no período da pesquisa, sendo 426 o número de respondentes. Os dados foram analisados com modelagem de equações estruturais. Os resultados evidenciaram que discricionariedade, normas e interesse público se associaram positivamente ao desempenho operacional. Para o desempenho institucional, somente as dimensões “normas” e “interesse público” se mostraram positivamente associadas. Os resultados indicam que a relevância dos diferentes motivadores do comportamento dos BNR varia de acordo com o desempenho observado e reiteram a assimetria de percepções entre os diferentes níveis organizacionais.

Palavras-chave: burocratas de nível de rua; policiais; desempenho.

1. INTRODUCTION

Street level bureaucrats (SLBs) are professionals who have direct contact with the public (Lipsky, 2010; Lavee & Cohen, 2019). Since they are on the front line in providing services, they represent the state in dealing with citizens (Lipsky, 2010) and they are strategic in terms of public interventions (Zarychta et al., 2019).

The asymmetry of knowledge that exists between them and the other levels of an organization (Gofen, 2014; Lima & D’Ascenzi, 2013; Zarychta et al., 2019) gives them freedom in exercising their work, and this is therefore considered a characteristic of SLBs (Brodkin, 2011; Evans, 2013), that is used in the pursuit of noble purposes or personal interests (Zarychta et al., 2019) as they act in the name of the state or the public (Maynard-Moody & Musheno, 2003).

Various factors influence the way in which SLBs make decisions (Dörrenbächer, 2017; Ferreira & Medeiros, 2016). Hill & Hupe (2014) and Keiser (2010) have identified to what extent these professionals feel responsible to the public and how they envision their organization’s objectives. Tummers and Bekkers (2014) emphasize that SLBs want to make a difference in people’s lives. Riccucci (2005) highlight the role of their attitudes and emotions in relation to society. Other works focus on the importance of elements such as ideology, attitudes, opinions, preferences, culture, and values (Brodkin, 2011; Cohen, 2018; Keiser, 2010), as well as the role of their relations with the users of public services (Keiser, 2010; Lotta & Marques, 2019).

Even though the literature stresses the importance of various factors in an isolated manner, these elements occur simultaneously and manifest themselves as influences that are intertwined in a more or less pronounced manner. Thus, there is still a theoretical gap in the understanding of which factors are effectively determinant in terms of SLB performance. Studies of the joint influence of this group of behavioral motivations on SLB behavior are still scarce (Ferreira & Medeiros, 2016).
Understanding how decisions are taken in practice is essential to the discussion of the role of SLBs in the implementation of public policies (Lotta, 2014).

Given this, we will analyze the influence of the interaction of these different motivations on SLB behavior and performance. In empirical terms, we will investigate the Federal Highway Police (PRF). Police officers are continuously described as SLBs in the literature (Alcadipani et al., 2020; Maynard-Moody & Musheno, 2003; Riccucci, 2005). To Lipsky (2010), the functions of the police are characteristic of SLBs, because they are first responder professionals who provide government services directly to society.

This article is divided in the following manner. The following section will present and discuss this study’s theory and hypotheses. The context of SLB actions will then be studied. The fourth section will characterize our research, presenting the way the data collection was performed and the analysis techniques were employed. The fifth section presents our analysis and discussion of the results. Finally, we will present our conclusions.

2. THEORETICAL REFERENCES

SLBs are front line workers who interact directly with the public, providing goods, services, and sanctions as they apply and implement policies and regulations (Lavee & Cohen, 2019). Three elements define their professional activities: performing routine activities that involve constant contact with the public; even though they are part of a bureaucratic structure, they have quite a bit of freedom in wielding the discretionary power which is inherent in their functions; and their decisions have direct effects on citizens in terms of their access to services or citizenship (Lipsky, 2010; Lotta, 2014). SLBs are essential actors in the formulation of public policies (Gofen, 2014; Maynard-Moody & Portillo, 2011), given that they interpret and reconstruct organizational guidelines and policies based on their interactions with public service users (Brodkin, 2011), influencing the way in which public policies are implemented (Hill & Hupe, 2014).

In their professional context, SLBs have great freedom in their actions (Brodkin, 2011; Evans, 2013) due to the distance between rules and the real situations they encounter, which may be unpredictable and require adaptation (Lipsky, 2010). In addition, the street level context often distances these professionals from the eyes of their superiors, which allows them to make decisions striking a balance between the surveillance of their superiors, the norms to be executed, the policy to be implemented, and their values and beliefs (Maynard-Moody & Musheno, 2003).

Various aspects influence the performance of SLB functions including organizational factors such as rules, management, and systems; individual principles, such as an individual’s profile, values, and work history; and systemic values, such as social and institutional logics (Lotta, 2020). Inspired by Ferreira and Medeiros (2016), in this article we will analyze the role of four central elements in the actions of SLBs: discretion, norms, the policy’s public, and self-interest. These are the four most recurrent motivations that appear in the literature.

The literature regarding SLBs indicates an asymmetry of information and perceptions between the highest levels of an organization and SLBs (Gofen, 2014; Lima & D’Ascenzi, 2013; Zarychta et al., 2019). It may be assumed that these differences in perception result in differences in the way the performance of these professionals is perceived, and as a result, evaluated. Thus, there will be differences in the way the upper echelons of an organization observe and evaluate SLBs and the perceptions of these professionals themselves in relation to the exercise of their functions.
To address these differences and assuming that distinct perspectives can be employed in evaluating public policies (Andersen et al., 2016), this work will adopt SLB performance as the criteria variable from two perspectives. The first will seek to evaluate SLB performance from the organization’s perspective, which will be termed institutional performance. The second will be the self-evaluation of the SLBs in regard to the performance of their activities, which will be termed operational performance.

Discretion is a crucial characteristic in the work of SLBs. This attribute is widely characterized and studied in the literature concerning this subject (Cavalcanti et al., 2018; Lotta, 2020; Lotta & Santiago, 2017). Discretion is understood to be the freedom delegated to workers to make decisions in certain contexts (Evans, 2013; Buta, Teixeira, & Fernandes, 2022).

The special relevance of discretion derives from the context of the actions of SLBs (Hill & Hupe, 2014; Thomann & Sager, 2017). To Lipsky (2010), it is necessary to deal with the uncertainties and pressures of SLB work, which involves the capacity to adapt policies to the specific contexts of their application (Brodkin, 2011). Implementation depends on routine judgements, decisions, and actions taken by SLBs, who exercise discretion to adjust policies to local contexts in the face of the restrictions and emergent demands of the community (Nunes & Lotta, 2019). Discretion enables SLBs to determine the nature, quantity, and quality of public policies that are delivered to society (Lotta, 2014; Ferreira & Medeiros, 2016), as well as their performance in the implementation of public policies (Buta et al., 2022).

In a reality characterized by limited resources, contradictory demands, and not very clear policies, SLBs practice discretion in combining policy requisites with the real demands they encounter on the street level (Gofen, 2014; Lotta et al., 2021; Tummers & Bekkers, 2014) in a way that makes them essential to implementation (Lotta, 2020). The loss of SLB discretion can negatively affect the implementation of public policies (Taylor, 2007). At the same time, increasing it can lead to an increase in the quality of the management, performance, and quality of public policies (Jessen & Tufte, 2014). Based on the proposed arguments, we establish our first research hypotheses:

H1.1: Discretion is positively associated with institutional performance.

H1.2: Discretion is positively associated with operational performance.

Norms influence the behavior of SLBs and policy results (Ferreira & Medeiros, 2016). The work environment of SLBs is confused terrain in which rules and procedures are immediately proximate to the target-public of these policies, so that identity and moral judgements are linked to the state’s public policy (Maynard-Moody & Musheno, 2003). To implement these policies, SLBs conduct an interpretation dynamic which transforms rules into actions. SLBs analyze the problem-situation and adjust their behavior in accordance with the norms that they perceive to be valid (Rosén, 2017). Even so, it is not possible to evaluate SLB behavior in a manner that is dissociated from the norms and regulations that guide it (Filgueiras & Aranha, 2011). The actions of bureaucrats are characterized by the rules instituted in the application of public policies and are indirectly influenced by decisions based on value judgements and moral dilemmas (Coêlho & Fernandes, 2017; Maynard-Moody & Musheno, 2003).

Rules can increase the capacity for action, efficiency, and the ability to solve problems and produce results. Rules can drive the conduct of SLBs, having a positive impact on their performance, guiding
them in the proper implementation of public policies (Oliveira, 2012). On the other hand, unclear or ambiguous norms can generate conflicts in terms of interpretation and diminish the capacity for SLB action (Matland, 1995). Thus, norms and regulations are essential to understanding intentional behavior in the implementation of public policies (Filgueiras & Aranha, 2011), given that their success depends on clear objectives and instructions expressed in the form of norms and regulations which enable implementors to understand a policy and know what is expected of them (Lima & D’Ascenzi, 2013).

Given this, we propose the following research hypotheses:

H2.1: Norms are positively associated with institutional performance.

H2.2: Norms are positively associated with operational performance.

According to Maynard-Moody and Musheno (2003), SLBs define their work in terms of relationships more than rules, which places the policy’s public in evidence. The authors differentiate what they term citizen-agents – when SLBs justify their actions in the name of citizens – from state-agents – when the action is justified in the name of the state and its norms. The interaction process between SLBs and the target public of public policies has drawn attention from a variety of researchers, such as Boer and Eshuis (2018) and Lotta and Marques (2019). Proximity to the policy’s public is described as a motivating factor in SLB actions (Zarychta et al., 2019). Variations in the way SLBs perceive policy beneficiaries in an empathetic manner are determinant in prioritization processes and decisions regarding their way to act (Jensen & Pedersen, 2017).

To Tummers et al. (2015), the connection between bureaucrats and citizens is strengthened to the extent that SLBs project their actions on citizens. Their daily work is full of situations where there is no control, in which crucial decisions about a policy that needs to be implemented are taken during their interactions with the public affected by these actions (Nunes & Lotta, 2019). This proximity with the reality experienced by the policy’s public and their knowledge of the impact caused offer SLBs experiences that directly affect the way in which they perform their functions (Boer & Eshuis, 2018; Tummers et al., 2015).

SLBs first evaluate the citizen and then find a rule or procedure that will provide the type of service that fits the value judgements they have made in regard to that individual (Jilke & Tummers, 2018; Maynard-Moody & Musheno, 2003). The way these professionals perceive these service users and the problems that they face is fundamental to explaining the patterns of their decision making in the implementation of policies (Jilke & Tummers, 2018; Lotta, 2014). Their behavior and activities are determined by the evaluations they make of citizens based on their interactions (Keiser, 2010). Thus, we propose the following research hypotheses:

H3.1: Proximity to the public is positively associated with institutional performance.

H3.2: Proximity to the public is positively associated with operational performance.

SLB behavior is influenced by their own interests, and often leaves norms and the policy’s public in the background (Brehm & Gates, 1997; Ferreira & Medeiros, 2016). We cannot presume that SLBs make decisions without purpose, or that in other words their interests, even though they are
personal, are separated from their behavior and conduct (Oberfield, 2014; Zedekia, 2017). To Cohen and Hertz (2020), they interact with the public to implement public policies, but their decisions take into account their own interests and what they believe is the best way to put them into practice, which is reflected in their work performance. This aspect is reinforced by the difficulty that their superiors have in monitoring SLB actions (Zedekia, 2017).

To some authors, individual interests are one of the dominant factors that shape SLB behavior, because even though organizational efforts are important, in general bureaucrats remain strongly partial to their original nature (Duflo et al., 2012; Oberfield, 2014). These professionals can be classified as individualists, given that they make decisions based on their own interests and are indifferent to the effects of their actions on the public, especially when the objective is maximizing personal returns (Murphy & Ackermann, 2014). Thus, their actions are motivated by practices that provide them with direct benefits for their personal satisfaction (Ferreira & Medeiros, 2016).

Meyer et al. (2014) emphasize the need from there to be a convergence between an SLB’s interests and those of the administration in order for the public policy to have good results. One cannot understand SLB behavior without understanding their socialization and how self-interest is involved in their activities (Oberfield, 2014). Based on these considerations, we propose the following research hypotheses:

**H4.1:** Self-interest is positively associated with institutional performance.

**H4.2:** Self-interest is positively associated with operational performance.

Figure 1 summarizes the research hypotheses and presents the theoretical model that this study will test.
3. THE CONTEXT OF THIS STUDY

The Federal Highway Police (PRF) is part of the National System of Public Safety and its responsibilities as stipulated by Decree nº 11,348/2023 include ensuring the safety of those who use federal highways, providing emergency services for victims of traffic accidents, and protecting federal property. The PRF operates throughout the entire country and its functions include the prevention and repression of crime, especially fighting the theft of vehicles and cargoes, drug trafficking, smuggling, and the avoidance of paying duties. It also highlights activities related to driving education, accident prevention, and passenger and cargo surveillance (Polícia Rodoviária Federal [PRF], 2018). It is a heterogenous scenario, in which police officers are exposed to various types of public and contexts to which they apply a diverse array of regulations and norms specific to each subject.

The PRF consists of a force of roughly 10 thousand officers, and it differs from other public safety organizations in that it is a civil force which contemplates only one career path. There are no positions that exercise specific functions in a differentiated hierarchy like other federal or state police forces. All the professionals are federal highway police officers and are differentiated only by the year they entered the force and the functional levels they have obtained.

The PRF also has upper and middle echelon bureaucrats, with the former being responsible for strategic decisions, and the latter being responsible for intermediate management decisions, with their being located between the upper echelon (managing director, directors, and superintendents) and police officers who execute activities directly in contact with the public. The functions of unit leaders are established based on policy and trust. Even though the PRF has different hierarchical levels, all of these public servants act or have acted on the front line in implementing the organization’s public policies. Thus, these professionals are considered a singular object in SLB studies.

4. METHODOLOGY

In terms of the literature, quantitative SLB studies are not usual (Dörrenbächer, 2017; Tummers & Bekkers, 2014), which suggests this is a promising area for exploration. There is room for the development of new methodologies within this context.

SLB studies have proven to be good at identifying the motivations for the behavior of these professionals which are often studied separately, with there being a gap in the research in terms of their joint effect. To fill this gap, we propose a hypothetical-deductive study featuring the application of quantitative techniques to test the proposed relationships from a joint perspective and identify which motivations are effectively relevant to explaining SLB performance. We have observed a lack of quantitative SLB studies within the context of the implementation of public policies (Dörrenbächer, 2017).

The analyzed data comes from primary sources and was collected through a questionnaire sent to PRF public servants. The research instrument is divided into three broad sections. The first features socio-demographic questions that seek to characterize the respondent. The second contains questions related to the discretion, norms, self-interest, and public interest constructs. The third consists of questions related to the respondent's performance, divided into institutional performance with questions regarding the respondent's annual PRF performance evaluation, and operational performance with questions related to the police officer's self-evaluation of the performance of his or her activities.
The questions in the second and third sections use a seven-point agreement scale, ranging from 1 (totally disagree) to 7 (totally agree). Box 1 presents the constructs, the questions, and the bibliographic references on which they are based.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Questions</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discretion</td>
<td>Disc_1. I have the freedom of action to make decisions during my activities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disc_2. I have the autonomy to choose my activities during the day.</td>
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<td></td>
<td>Disc_3. There are situations in which I can omit implementing instructions provided by my superiors.</td>
<td>Lipsky (2010); Lotta (2014); Tummers and Bekkers (2014)</td>
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<tr>
<td></td>
<td>Disc_4. My opinion matters in the execution of my activities.</td>
<td></td>
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<tr>
<td></td>
<td>Disc_5. In the PRF I can decide how to implement my activities.</td>
<td></td>
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<tr>
<td></td>
<td>Disc_6. I make decisions in an independent manner.</td>
<td></td>
</tr>
<tr>
<td>Norms</td>
<td>Norm_1. Following laws is normal in my activities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Norm_2. Following internal manuals is usual in my activities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Norm_3. Norms determine my conduct in specific situations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Norm_4. Norms provide parameters for my actions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Norm_5. Norms guide the way I act.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Norm_6. Norms should be respected, independent of the circumstances.</td>
<td></td>
</tr>
<tr>
<td>Public Interest</td>
<td>Púb_1. I consider the needs of the public in the exercise of my activities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Púb_2. My interaction with the public influences the way in which I act.</td>
<td></td>
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<tr>
<td></td>
<td>Púb_3. I put myself in the position of the citizen when I make my decisions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Púb_5. As I develop my activities, I succeed in adapting them to the needs of the citizen.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Púb_6. My decisions contribute to the well-being of the citizens with whom I interact.</td>
<td></td>
</tr>
<tr>
<td>Self-interest</td>
<td>Auto_1. My wishes count in my decision making.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Auto_2. My motivation takes into account individual benefits that I may accrue.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Auto_3. My self-interest is reflected in every decision I make.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Auto_4. I work with alacrity when the activities that I perform benefit me personally.</td>
<td>Lavee et al. (2018); Nielsen (2015); Zedekia (2017)</td>
</tr>
<tr>
<td></td>
<td>Auto_5. I am only satisfied when I am acting in accordance with my own wishes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Auto_6. I may have made personal decisions that have violated professional ethics.</td>
<td></td>
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</tbody>
</table>
### Construct Questions References

<table>
<thead>
<tr>
<th>Construct</th>
<th>Questions</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional performance</strong></td>
<td>Desemp_1. I received a good productivity evaluation for my individual performance over the past 12 months.</td>
<td>PRF Individual Performance Evaluation</td>
</tr>
<tr>
<td></td>
<td>Desemp_2. I received a good productivity evaluation for my organizational performance over the past 12 months.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Desemp_3. I received a good evaluation from my colleagues and peers over the past 12 months.</td>
<td></td>
</tr>
<tr>
<td><strong>Operational performance</strong></td>
<td>Desemp_4. The way in which I work reflects good performance of PRF activities.</td>
<td>Boer and Eshuis (2018); Van Loon and Jakobsen (2018); Van Engen et al. (2018)</td>
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<tr>
<td></td>
<td>Desemp_5. I motivate my colleagues to obtain better results in our activities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Desemp_6. I am aware that my performance is reflected in the performance of the PRF.</td>
<td></td>
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<td></td>
<td>Desemp_7. I always make an effort to implement my activities with success.</td>
<td></td>
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<tr>
<td></td>
<td>Desemp_8. My actions are motivated by the continual improvement of the actions of the PRF.</td>
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</table>

**Source:** Elaborated by the authors.

Before being applied, the instrument was submitted to a validation by judges consisting of Ph.D. researchers with experience in SLB studies or subjects related to individual behavior. Based on a presentation of the concepts and the questions proposed to measure them, we asked the judges to evaluate the pertinence of the questions in measuring the proposed constructs. The research instrument was also submitted to a semantic validation by a group of potential respondents who evaluated the clarity of the questions and any possible problems related to their interpretation. Based on these considerations and their critiques, the questions were corrected and adapted.

The questionnaire was sent to the institutional email of the 10,014 PRF officers active during the research period. The data collection occurred during 2021. This was followed by cleaning up the database and the elimination of extreme cases, and the final sample consisted of 426 questionnaires.

Table 1 presents the profile of the analyzed sample. It may be observed that the respondent profile was predominantly male. In terms of education, most had a college education, which is a requirement for those who have qualified more recently for these positions. In terms of age, most of the respondents were between the ages of 34 and 49. The average time of service in the sample was 14 years, with most entering the police between 2001 and 2005.
### TABLE 1 SAMPLE PROFILE

<table>
<thead>
<tr>
<th>Gender</th>
<th>%</th>
<th>Education</th>
<th>%</th>
<th>Age</th>
<th>%</th>
<th>Year Entered</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>86.4</td>
<td>High school</td>
<td>3.3</td>
<td>18 to 25</td>
<td>1.6</td>
<td>Before 1990</td>
<td>0.2</td>
</tr>
<tr>
<td>Female</td>
<td>13.4</td>
<td>College</td>
<td>52.1</td>
<td>26 to 33</td>
<td>16.4</td>
<td>From 1990 to 1995</td>
<td>10.1</td>
</tr>
<tr>
<td>Undeclared</td>
<td>0.2</td>
<td>Specialization</td>
<td>36.9</td>
<td>34 to 41</td>
<td>31.5</td>
<td>From 1996 to 2000</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Master’s</td>
<td>7.5</td>
<td>42 to 49</td>
<td>33.3</td>
<td>From 2001 to 2005</td>
<td>26.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ph.D.</td>
<td>0.2</td>
<td>50 to 57</td>
<td>13.6</td>
<td>From 2006 to 2010</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>58 to 65</td>
<td>3.1</td>
<td>From 2011 to 2015</td>
<td>18.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Absent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.3</td>
</tr>
</tbody>
</table>

**Source:** Elaborated by the authors.

The data was analyzed using Structural Equation Modeling (SEM), a modeling technique used to test the validity of theoretical models which defines hypothetical causal relationships among the variables (Marôco, 2014). The parameter estimates were performed using maximum likelihood estimators, which are the most often used in SEM and produce centered, consistent, and unbiased estimates (Hair et al., 2010; Marôco, 2014).

The fit of the models was verified using the following indicators. The relationship between the chi-squared coefficient and the degrees of freedom ($X^2/d.f.$) is an absolute index used to verify the quality of the model, with values less than 2 being considered adequate (Hair et al., 2010; Marôco, 2014). The root mean square error of approximation (RMSEA) indicator is an index of populational discrepancy which penalizes the complexity of models (Marôco, 2014). RMSEA values below 0.05 are considered very good (Marôco, 2014). The goodness of fit index (GFI) indicates the proportion of covariances observed among the variables manifested by the model. The comparative fit index (CFI) is a relative index which evaluates the fits of the model in relation to a totally independent model. The CFI and GFI values range from 0 to 1, with values above 0.9 indicating a good fit (Hair et al., 2010; Marôco, 2014). The parsimonious goodness of fit index (PGFI) and the parsimonious comparative fit index (PCFI) are parsimonious indices obtained by the correlation of the previous indices with a penalization factor associated with the complexity of the model. Values above 0.6 are considered acceptable and those over 0.8 are considered good (Marôco, 2014).

The analyses were performed using the Amos software. The resulting sample is sufficient for the application of this technique according to the instructions of Hair et al. (2010) and Marôco (2014). The following section will present our results.
5. RESULTS

5.1. Statistical analyses

Before verifying the structural model, we employed confirmatory factor analysis following the instructions of Hair et al. (2010) and Marôco (2014) to evaluate the measurement model and verify the validity and reliability of the constructs. Variables with factor weights less than 0.5 or duplicated weights were excluded. The resulting measurement model presented acceptable fit indicators according to the reference parameters presented by Marôco (2014): RMSEA = 0.040; GFI = 0.935; CFI = 0.969; PCFI = 0.814; PGFI = 0.717; $X^2$/d.f. = 1.689.

Considering the fit of the model, we proceeded to verify the validity and reliability of the constructs (Table 2). All of the variables presented standardized coefficients above 0.5, which suggests individual reliability (Marôco, 2014). The composite reliability (CR) and the average variance extracted (AVE) were above the parameters stipulated by Hair et al. (2010) and Marôco (2014) – 0.7 and 0.5, respectively – indicating the convergent validity and reliability of the constructs.

The discriminant validity was evaluated by comparing the value of the square root of the AVE with the correlation value between the constructs, in accordance with the instructions of Marôco (2014). For all of the constructs, the value of the square root of the AVE was greater than the correlation between the constructs, which suggests their discriminant validity.

**TABLE 2 VALIDITY AND RELIABILITY OF THE CONSTRUCTS**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Construct</th>
<th>Std. Coef.</th>
<th>CR</th>
<th>AVE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desemp_1</td>
<td>Institutional Performance (1)</td>
<td>0.83</td>
<td>0.95</td>
<td>0.85</td>
<td>0.92</td>
<td>0.146</td>
<td>0.283</td>
<td>0.123</td>
<td>-0.084</td>
<td>0.308</td>
</tr>
<tr>
<td>Desemp_2</td>
<td>Desemp_3</td>
<td>0.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disc_5</td>
<td>Discretion (2)</td>
<td>0.84</td>
<td></td>
<td></td>
<td>0.81</td>
<td>0.52</td>
<td>0.146</td>
<td>0.72</td>
<td>0.265</td>
<td>0.151</td>
</tr>
<tr>
<td>Disc_4</td>
<td>Disc_2</td>
<td>0.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disc_1</td>
<td>Disc_5</td>
<td>0.73</td>
<td></td>
<td></td>
<td>0.72</td>
<td>0.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norm_5</td>
<td>Norms (3)</td>
<td>0.75</td>
<td></td>
<td></td>
<td>0.82</td>
<td>0.53</td>
<td>0.283</td>
<td>0.265</td>
<td>0.72</td>
<td>0.115</td>
</tr>
<tr>
<td>Norm_4</td>
<td></td>
<td>0.72</td>
<td></td>
<td></td>
<td>0.72</td>
<td>0.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norm_3</td>
<td></td>
<td>0.72</td>
<td></td>
<td></td>
<td>0.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norm_2</td>
<td></td>
<td>0.71</td>
<td></td>
<td></td>
<td>0.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Considering the verification of the validity and reliability of the constructs, we performed the structural relationship test proposed by the theoretical model. The tested model (Figure 2) presented acceptable fit indicators: RMSEA = 0.047; GFI = 0.925; CFI = 0.956; PCFI = 0.832; PGFI = 0.735; \( \chi^2/df = 1.940 \). Table 3 presents the results of the paths tested in the structural model.

**TABLE 3 PATHS OF THE STRUCTURAL MODEL**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized Coefficient</th>
<th>p-value</th>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Perform.</td>
<td>&lt;-- Discretion</td>
<td>0.089</td>
<td>0.100</td>
<td>H1.1</td>
</tr>
<tr>
<td>Institutional Perform.</td>
<td>&lt;-- Norms</td>
<td>0.264</td>
<td>0.000</td>
<td>H2.1</td>
</tr>
<tr>
<td>Institutional Perform.</td>
<td>&lt;-- Public Interest</td>
<td>0.104</td>
<td>0.056</td>
<td>H3.1</td>
</tr>
<tr>
<td>Institutional Perform.</td>
<td>&lt;-- Self-interest</td>
<td>-0.072</td>
<td>0.167</td>
<td>H4.1</td>
</tr>
<tr>
<td>Operational Perform.</td>
<td>&lt;-- Discretion</td>
<td>0.108</td>
<td>0.057</td>
<td>H1.2</td>
</tr>
<tr>
<td>Operational Perform.</td>
<td>&lt;-- Norms</td>
<td>0.410</td>
<td>0.000</td>
<td>H2.2</td>
</tr>
<tr>
<td>Operational Perform.</td>
<td>&lt;-- Public Interest</td>
<td>0.149</td>
<td>0.010</td>
<td>H3.2</td>
</tr>
<tr>
<td>Operational Perform.</td>
<td>&lt;-- Self-interest</td>
<td>-0.003</td>
<td>0.962</td>
<td>H4.2</td>
</tr>
</tbody>
</table>

**Notes:** Values in bold represent the square roots of the AVE values for the respective constructs.

**Source:** Elaborated by the authors.
5.2 Discussion

Discretion is described as relevant to the actions of SLBs due to the need to adapt their behavior to the uncertainties and dynamics of real situations (Lipsky, 2010; Tummers & Bekkers, 2014). Given the conditions that SLBs work within, discretion is a characteristic that is positively associated with performance in the implementation of public policies (Buta et al., 2022; Lotta, 2020; Thomann & Sager, 2017). Our results partially corroborate this perspective. Discretion presented significant and positive results in relation to the self-evaluations of the performance of SLB activities (operational performance), however it did not present a significant association with the perception of performance as evaluated by the organization (institutional performance).

This difference in the discretion results corroborates the argument that SLBs and their superiors have distinct visions of the implementation of public policies (Lima & D’Ascenzi, 2013; Oliveira, 2012; Zarychta et al., 2019). This aspect was also corroborated by the low positive correlation between operational performance and institutional performance that was observed in Table 1.

Source: Elaborated by the authors.
It should be emphasized that all of the PRF public servants follow a single career path. This aspect, however, did not result in a convergence of perceptions in terms of performance in the implementation of the organization’s policies. The way in which the organization evaluates performance is partially dissociated from how SLBs perceive the performance of their activities, which supports the arguments of Zedeikia (2017) regarding the difficulty that superiors have in monitoring the actions of SLBs, as well as those of Gofen (2014) in terms of the divergencies between SLBs and their superiors.

Even though PRF officers have a single career path, the designation of management positions can modify their perspective, even if only temporarily in the evaluation of the performance of SLB activities. This distinct perspective shows the paradoxical visions of SLBs and management (Lipsky, 2010). The former group is subjected to the pressures of implementing a policy and organizational guidelines, while managers, who are known as street-level managers (Gassner & Gofen, 2018), are more focused on achieving performance targets and providing answers to the upper echelons.

SLBs are described as the formulators of public policies, given that they interpret and adjust organizational norms and instructions to the real cases they encounter (Brodkin, 2011; Gofen, 2014; Hill & Hupe, 2014). Discretion enables SLBs to adapt the planned policy to the real restrictions and demands of the implementation process (Ferreira & Medeiros, 2016; Nunes & Lotta, 2019). The results indicate that this adaptation is positive from the SLB perspective, but it is not associated with the organization’s point of view.

The literature treats discretion as the main factor that explains SLB decision making (Lipsky, 2010; Lotta, 2021; Lotta & Santiago, 2017). The standardized coefficients encountered, however, suggest that it is less relevant to operational and institutional performance than the norms or the public interest of the implemented policies.

The norms are positively associated with both institutional and operational performance. They provide an incentive structure for behavior which they end up translating into appropriate performance (Lima & D’Ascenzi, 2013; Oliveira, 2012). SLBs, however, analyze and evaluate the experienced situation to guide their behavior in accordance with the rules that are perceived to be applicable to a specific case (Rosén, 2017).

Based on a comparison of the standardized coefficients, it is interesting to observe that norms are the aspect with the greatest weight in terms of performance, from both the institutional and operational perspectives. This result, even though it was not hypothesized, was expected because of the specific type of SLB studied and the relevance of legality in police actions. As pointed out by Thomann and Sager (2017), in the specific case of police officers, freedom of action should be contrasted with what they can do in a legal manner, supported by norms.

This specific characteristic of SLBs who are police officers diminishes their impetus in discretionary decisions (Thomann & Sager, 2017). The results corroborate this perspective and suggest that police officers, like SLBs, can justify their actions more as state agents, as they are termed by Maynard-Moody and Musheno (2003) – than as citizen agents, or in other words, their work is strongly influenced by the normative dimension.

In terms of other standard coefficient comparisons, norms presented a greater weight for operational performance than institutional performance. As highlighted by Maynard-Moody and Musheno (2003), SLBs make their decisions striking a balance between the supervision of their superiors, the norms to be executed, and the policy to be implemented. The results suggest that in the analyzed context norms are more central to police officers than to the organization itself. Occasionally instructions regarding
expected behavior and results appear to be given less weight than norms (Filgueiras & Aranha, 2011; Lima & D'Ascenzi, 2013) which provide a secure environment for police actions.

This finding of the primacy of legality over discretion continues the debate begun by Araújo (2014), which discusses the street level bureaucracy that performs surveillance, and here we can include the PRF, qualifying them as “moral entrepreneurs” or “rule imposers”, which amplifies the individual perspective addressed by Lipsky (2010) involving an interactionist approach. The results reiterate the perspective that norms are relevant for the studied SLBs. However, given their proximity to the public whom the norms apply to, and the inherent complexity of the environment in which police officers act (Alcadipani et al., 2020; Zacka, 2017; Zedekia, 2017), there is still room for discretion in their actions in the implementation of policies, as argued by Maynard-Moody and Musheno (2003).

These arguments are supported by the positive association between norms and performance in general, as well as discretion and operational performance. Even though norms are necessary, their incomplete nature in the face of a complex environment means that some degree of discretion is needed in the activities of the studied SLBs.

It may also be observed that there is a positive association between the public interest and operational and institutional performance. The public interest construct refers to the way SLBs use empathy with the customers of public policies (Lipsky, 2010; Tummers et al., 2015) or how they justify their actions in the name of the public (Maynard-Moody & Musheno, 2003). Developing empathy facilitates the understanding of the needs of citizens and improves the implementation of public policies (Cavalcanti et al., 2018; Fernandez & Lee, 2016). Our findings corroborate this perspective and indicate that some level of relationship and empathy in interactions between SLBs and the public affected by a public policy tends to result in better performance of police activities.

This positive association between the public interest and performance in the implementation of public policies has already been described in terms of policies related to health (Lotta, 2021), education (Nielsen, 2015), and social well-being (Collins et al., 2007). The findings reinforce this idea and also suggest its validity for SLBs who act in the area of public safety, which by nature consists of sporadic interactions and is not restricted to individuals seeking public services (Alcadipani et al., 2020). Given that police work is highly normalized (Marra et al., 2016), the results indicate that an understanding of the reality of citizens who are the objects of government interventions favors performance in the implementation of public policies.

The literature describes SLB behavior as being influenced by their self-interests, with their practices being motivated by their personal satisfaction and objectives (Ferreira & Medeiros, 2016; Oberfield, 2014). SLB behavior is directly associated with individual interests (Duflo et al., 2012; Oberfield, 2014). However, within the analyzed context, SLB self-interest was not associated with performance in the implementation of public policies. These results diverge from the perspective proposed by Meyer et al. (2014) in which performance in the implementation of public policies requires a convergence of interests with the interests of SLBs, as well as the idea proposed by Zedekia (2017) that the interests of public agents harm the implementation of public policies.

This contradiction with the literature can be justified by the fact that the subjects of this study form a singular population of SLBs. Police officers can be rigorously punished for performing their activities for their own personal gain or outside of the reigning norms, such as cases of the use of disproportionate force, which is an abuse of power and constitutes deviant conduct (Marra et al., 2016).
Thus, the nature of the organization and its functions, its observance of norms, and its distinct hierarchy, which are often expressed in protocols which are part of the training and refresher training of PRF officers, discipline police procedures in the most diverse situations when dealing with the public and establish limits to their discretion.

6. CONCLUSION

This study analyzes the influence of the interaction of various motivations in SLB behavior in their performance as they implement public policies. Specifically, the responses from a sample of PRF officers were analyzed using quantitative techniques. SLB studies are usually characterized by the use of qualitative techniques in data collection and analysis. Few studies have adopted a quantitative perspective (Dörrenbächer, 2017; Tummers & Bekkers, 2014). Considering this gap, the research instrument that we have constructed and validated represents a first contribution to this area.

The literature emphasizes the role of SLBs in the execution and implementation of public policies, with various characteristics guiding their behavior in their interactions with the public. Our findings demonstrate that not all forms of behavior effectively contribute to the proper implementation of policies. Even though the results should be understood as being a function of the studied SLBs, it is interesting to observe that when analyzed as a whole, not all of the distinguished dimensions affect SLB performance. The identification of those characteristics that are effectively relevant to their performance in implementing public policies is a contribution of this study.

The findings also demonstrate that discretion, norms, and the public interest are positively associated with performance as perceived by these professionals in their self-evaluations of the execution of their activities (operational performance). For the performance evaluated from the organization’s perspective (institutional performance), only the “norms” and “public interest” dimensions demonstrated a positive association. Self-interest was not significant in relation to any of the performance factors.

The observed differences in the results for the various performance factors reiterate the perspective that there are differences in perception within the same body in terms of how policies should be implemented. Even in a public safety body based on a rigid hierarchy and norms, there is asymmetry of information between the upper echelons of the organization and the agents who execute these policies.

This study does have its limitations. As we have pointed out, the findings should be considered in terms of the SLBs we are studying. The analyzed sample is not random, so any populational inference is compromised. The research instrument was first used in this work, and it can be improved to better measure the constructs related to behavior motivations as well as SLB performance. One aspect that can be improved is the measure of performance. The measuring of behavioral and performance variables in the same instrument can lead to common method bias (Podsakoff et al., 2003). We suggest that future studies should seek different sources to evaluate performance or employ other forms of performance to diminish the chances of this occurring.

Given these limitations, future studies could replicate the proposed theoretical model in other public safety organizations to verify whether the relationships encountered here are peculiar to the PRF or can also be observed in other contexts. These new applications would make it possible to verify the measurements of the research instrument. It is understood that the literature regarding this
subject needs more quantitative studies mainly of a hypothetical-deductive nature that will make it possible to test the described associations.

New studies could complement the proposed theoretical model, offering new dimensions regarding the implementation of public policies or proposing new factors that shape SLB behavior. In addition to amplifying discussions of various characteristics, the addition of other factors could employ a more elaborate variable structure that would be distinct from this study.

Another alternative would be complementing this study with a qualitative perspective to validate the results and provide a deeper understanding of the explanations presented here.
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Gabriela Lotta: Project administration (Supporting); Supervision (Supporting); Validation (Supporting); Visualization (Supporting); Writing - original draft (Supporting); Writing - review & editing (Equal).

João Mendes Rocha Neto: Project administration (Supporting); Supervision (Supporting); Validation (Supporting); Visualization (Supporting); Writing - original draft (Supporting); Writing - review & editing (Equal).

DATA AVAILABILITY

The dataset supporting the results of this study is not publicly available.

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