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## EMPIRICAL ANALYSIS OF FACTORS INFLUENCING THE GRANTING OF PRELIMINARY INJUNCTIONS IN PERNAMBUCO'S FEDERAL COURT

### ANÁLISE EMPÍRICA DOS FATORES QUE INFLUENCIAM NA CONCESSÃO DE LIMINARES EM MANDADO DE SEGURANÇA NA SEÇÃO JUDICIÁRIA DA JUSTIÇA FEDERAL DE PERNAMBUCO

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**ABSTRACT:** What does influence the issuance of Preliminary Injunctions (*in limine*) in Writs of Mandamus within the jurisdiction of Pernambuco's Federal Court? To protect citizens against abuse of power or illegality committed by a member of the Public Administration, the Federal Constitution provides the writ of mandamus as a procedural instrument (section 5, subsection LXIX and LXX, of the Brazilian Federal Constitution, and the Law No. 12.016/09). Existing literature in the fields of procedure law and administrative law highlights the potential conflicts and violations of clear and indisputable rights that can arise from the improper granting or denial of preliminary injunctions. This article aims to empirically examine, through logistic regression analysis (logit), the factors that influence the issuance of Preliminary Injunctions (*in limine*) in Writs of Mandamus within the jurisdiction of Pernambuco's Federal Court.

**KEYWORDS:** Preliminary Injunction; Writs of Mandamus; Judicial Behavior; Empirical Analysis; Logistic Regression Analysis.

**RESUMO:** Quais fatores aumentam ou diminuem as chances de concessão de liminares nos julgamentos de Mandado de Segurança na Seção Judiciária da Justiça Federal de Pernambuco? Para proteger os cidadãos contra o abuso de poder e ilegalidades cometidas por autoridades do Poder Público, a Constituição Federal de 1988 prevê, no artigo 5º, inciso LXIX e LXX; e na Lei nº 12.016/09, o mandado de segurança, como um instrumento processual. A literatura da área de Direito Processual e do Direito Administrativo argumentam que a denegação ou concessão de liminar mal decidida ensejam impetração de Mandado de Segurança (MS) perante a instância superior por se tratar de violações a direito líquido e certo. Este artigo testa empiricamente, por meio da análise por regressão logística (*logit*), quais fatores influenciam nas chances de ocorrência do evento de concessão de Liminar em MS.

**PALAVRAS-CHAVE:** Tutela Provisória de Urgência; Mandado de Segurança; Liminares; Pesquisa Empírica; Análise por Regressão Logística.

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## INTRODUÇÃO

The Federal Constitution of 1988 is considered a key element in the Brazilian institutional arrangement because it is the foundation of the democratic constitutional state that guarantees a universe of fundamental rights to whom people are directly connected. Since the enactment of the Federal Constitution of 1988 provides a set of protection for those rights, it also interferes both in the procedures and decisions taken by institutions and the political actors.

To protect citizens against abuse of power or illegality committed by a member of the Public Administration, the Federal Constitution offers a mechanism that ensures immediate and ascertainable rights called the writ of mandamus (section 5, subsection LXIX and LXX, of the Brazilian Federal Constitution). Such prevision is also regulated, in an infra-constitutional legislation (which means at a hierarchical level below the Constitution) and enforced by the Law n<sup>o</sup>. 12.016/09, which disposes of the use of the writ of mandamus, both in individual and collective actions.

Despite that rule, existing literature in the fields of procedure law and administrative law highlights the potential conflicts and violations of clear and indisputable rights that can arise from the improper act by an official[s] or [the] agent[s] of an artificial person performing governmental duties — which can also be violative illegality or abuse by them.

In this scenario, a question arises: What does influence the issuance of Preliminary Injunctions (*in limine*) in Writs of Mandamus within the district of Pernambuco's Federal Court? Considering the Court's main role in the promotion of access to justice and the enforcement of fundamental rights, this paper will present an outline of the discussion on the right of the issuance of Preliminary Injunctions (*in limine*) in Writs of Mandamus and the factors that can influence the decision-making process behind granting or denying such injunction.

After drafting this general framework, it will be applied quantitative empirical method in some actions concerning writ of mandamus, within the district of Pernambuco's Federal Court, to test the association between those factors and the issuance of preliminary injunctions.

This paper is divided into three sections. The first one presents how the institute of the preliminary injunction in writs of Mandamus works in Brazilian legislation. In the second section, it is discussed how other factors can influence the decision-making process behind granting or denying such injunction and its repercussions, such as the potential conflicts and violations of clear and indisputable rights that can arise from the improper granting or denial of preliminary injunctions. The third one shows and describes the method that was used to answer the research problem. The fourth section presents the results of the empirical test.

With this empirical model, this paper is part of an extended research agenda's Lab on Judicial Behavior which aims to contribute to a better understanding of the potential conflicts and violations of clear and indisputable rights, as well as to shed light on an underexplored area within the literature on institutional behavior.

## **1 PRELIMINARY INJUNCTION IN WRITS OF MANDAMUS IN BRAZILIAN LEGISLATION: LITERATURE REVIEW, LEGAL PROVISION, AND OTHER ASPECTS**

The Constitutional and Procedure Law literature comments that the Brazilian judicial system provides a writ of security (which is also called mandamus), and not protection (a procedural mechanism that is used in other Iberian American countries such as Mexico and Venezuela) (Oquendo, 2021, at 72; Oquendo, 2022, at 69-74). Therefore, the Writs of Mandamus is a procedural mechanism that secures immediate and ascertainable rights against abuse of power or illegality committed by a member of the Public Administration.

Aside from all the issues mentioned so far, Santos Lucon (2016, at 496) and Burgoa (1943, at 714-717) explain, from the perspective of a comparative law review, that the writ of mandamus approaches Mexican protection insofar as it allows the suspension of the contested act before the final judgment of the case by the judge (in initio it is) and its decision and as a request of the applicant. Nonetheless, the writ of security (provided in the Brazilian judicial system) and the writ of mandamus (which has its origin in

the American Law system called common law) present intercessions, the literature on Procedure Law has highlighted that these procedural instruments are not the same.

In American Law and other countries in which the common law is applied, the writs are instruments of control of the Public Administration which can be divided into three species of writs: a) writ of certiorari, b) writ of prohibition, and c) writ of mandamus. It is worth mentioning, on this matter, that each of them has its purpose and produces different effects: the writ of certiorari is used to combat the illegal commission of authorities; the writ of prohibition is used before the illicit act as it has a preventive character; the writ of mandamus, in its turns, aims to attack omissions of acts of those authorities (Bernett, 2017, at 643-644).

The writ of mandamus in Brazil is both restricted and separated into four species, according to the nature of the act of those political actors and its extension. From the perspective of the extension (or effect) of the act, there is an a) individual writ of mandamus, which is used when a citizen or an enterprise wants to go against an authority of legal entity that performs a public activity in a no regular way that affects them (Meirelles, 2002, at 31); and a b) collective writ of mandamus, which is used when public authorities make an act that affects uncountable people (Barbi, 2002, at 236). In a particular approach, when it comes to the nature of the act, there are what literature calls d) repressive writ of mandamus, which is used after the Public Administration official makes some act that violates the immediate and ascertainable rights against a citizen (Meirelles, 2002, at 31); and the e) preventive writ of mandamus (that has similarities with the common law writ of prohibition), which is used when a public official is threatening some constitutional or infra-constitutional right of a person (Meirelles, 2002, at 31).

In both cases and species of Brazilian writ of mandamus, its Law foresees the necessity of protecting citizens against abuse of power or illegality committed by a member of the Public Administration (which includes Municipalities, States, or the Federal Union) (Meirelles, 2002, at 31) and provides the writ of mandamus as an instrument that performs all the previous functions concerning the writ of certiorari, writ of prohibition and writ of mandamus (which is the exact name to whom the law refer). With

this constitutional lawsuit, it is a resource, provided in section 5, subsection LXIX and LXX, of the Federal Constitution of 1988 and its correlated rule: Brazilian Law number. 12.016/09, which contemplates the civil protection can draw upon when public officials misinterpret the law (among other violations) as it aims to re-establish the legal situation and protect the right of a citizen arbitrarily restricted by a Public Administration authority (Meirelles, 2002, at 31).

## **2 BETWEEN THE GRANTING AND THE DENYING INJUNCTION: WHAT FACTORS INFLUENCE THE JUDICIAL DECISION-MAKING PROCESS?**

To protect citizen's fundamental rights against abuse of power or illegality committed by a member of the Public Administration, the Federal Constitution of 1988 provides, in its section 5, subsection LXIX and LXX, and the Law No. 12.016/09, the writ of mandamus. This resource is a procedural mechanism that secures, whether it is repressive or preventive, at once and ascertainable individual or collective rights against abuse of power or illegality committed by public officials. However, existing literature in the fields of procedure law and administrative law highlights the potential conflicts and violations of clear and indisputable rights that can arise from the improper granting or denial of preliminary injunctions.

What does influence the issuance of Preliminary Injunctions (in limine) in Writs of Mandamus within the jurisdiction of Pernambuco's Federal Court?

Throughout the decades, researchers from different areas were challenged to think about thinking (Gazzaniga; Ivry; Mangun, 2006, at 19-21) and decision-making. Although there is no doubt that the human brain — through its systems and microsystems — can perform the activities of thinking and deciding, scholars have realized the need to explain how human beings arrive at a certain decision through thinking. When making decisions, people follow a path, which involves processing information through a chain of neural systems. This process is conducted by the human brain through the nervous system, which, by manipulating information about the internal and

external environment, offers memory, consciousness, language, the ability to project mental self-image, and rationality (Kingsley, 2001, at 1).

Where do those improper granting or denial of preliminary injunction decisions come from?

The literature on the decision-making process argues that when making judgments or decisions, people, in various occupational areas (such as finance, medicine, as well as law) (Berthet, 2022), are susceptible to the use of simplified information processing strategies called heuristics which might result in predictable errors called cognitive biases (hereafter referred to as CB) (Tversky; Kahneman, 1974; Kahneman et. al., 1982; Gilovich, et. al, 2002).

Researchers in the areas of Law, Psychology, Economics, Neuroscience, and Philosophy show that there are extra-legal factors (those that are not linked to the law or norm) and meta-legal factors (which even transcend the field of law and norms) that influence the judge in his decision-making. The whole complexity of that process led a couple of scientists in several areas of Science to examine it considering how humans make decisions in practice:

Decisions, decisions. Life is full of them. You decided to read this book today. Earlier today you decided when to get up; whether to eat breakfast; and if so, what to eat. Usually, you make routine decisions such as these with little effort. But on occasion, you need to make important decisions that require more thought. Big decisions—such as selecting a car, a home, or a job—tend to be more difficult. The alternatives usually have a number of facets that need to be weighed. For instance, in choosing between several cars, you may want to compare their costs, roominess, fuel economy, handling, acceleration, stylishness, reliability, safety features, and warranties (Weiten, 2017, at 272).

Thus, some authors have taken on the challenge of thinking about the decision-making-process (hereafter the process of constructing decisions) from the fundamental and cognitive point of view as it is part of the human routine (Weiten, 2017; Maisto; Morris, 2004; Plous, 1993; Tversky; Kahneman, 1981; Tonetto; Renck; Stein, 2012). However, an aspect that the literature presents in this regard, is that decision-making is a complex cognitive process: irrespective of the choice, there will be a deciding process that consists of selecting alternatives (Tonetto; Renck; Stein, 2012, at 2). That being the case,

the decision-making process is a complex cognitive procedure because it demands the examination of the characteristics of each of the alternatives available and of the consequences that will arise from the choice to be made (Plous, 1993; Tversky, Kahneman, 1981; Simon, 1957).

In this context, cognitive behavioral psychology — which is an area of Psychology that presents some intercessions with the Law area due to its approach concerning the rule and its relationship with people — stands out as it examines the intern processes (such as the apprenticeship, memory, language, reasoning, thinking, etc.) (Eysenck; Keane, 2017, at 18) to understand the human thought process through behavioral pieces of evidence (Eysenck; Keane, 2017, at 19).

The Literature in the area of Cognitive behavior highlights that the use of simple strategies in decision-making focused primarily on the available possibilities (Maisto; Morris, 2004, at 293) has been seen as one of the factors that make such a process more intuitive than rational (Weiten, 2017, at 272). Thus, differently from what the Economic Sciences' theories of rational choice propose, humans have a limited cognitive capacity for mental activities (Maule; Hodkinson, 2002).

Based on this, theorists in the field began to question how people make efficient, adaptive, and satisfactory decisions in reality (Mellers; Schwartz; Cooke, 1998) through the search for rationality within the limits imposed on them, and not through rules (Kahneman, 2003). In addition to this and attending to the need to explain human behavior, studies on limited (or bounded) rationality allow us to comprehend how individuals, make decisions, since the decision-making process can be less rational and consistent (Mellers; Cols, 1998; Munier; Cols, 1999).

To deal with this limit in the face of the complexity of the world and human life, people were led to develop simple simplified information processing strategies that are connected with the cognitive process of decision-making.

Heuristics and biases came from Psychology research developed between the 50s and 60s (Tonetto et al., 2006), about people's behavior when making decisions to solve problems, especially those considered complex (and which require more care when making choices) Gilovich et al., 2002).

Concerning this point, the literature on decision-making points out that the seminal work of Kahneman and Tversky on decision-making in the 1970s opened up a vast research program on how decision-making differs from normative standards. Their studies propose that people tend to overestimate the accuracy of their judgments (overconfidence bias), to perceive events as being more predictable once they have occurred (hindsight bias), or to seek and interpret evidence in ways that are partial to existing beliefs and expectations (confirmation bias) (Tversky and Kahneman, 1974, 1982).

Even though human decisions are the result of their choice based on the available and existing alternatives, which can be predictable, some authors discuss that such decisions cannot be explained in logic and mathematical patterns (Simon, 1955; 1957; Sudgen, 1991; Tisdell, 1996; Colinsk, 1996; Hammond, 2000; Tonetto Et. Al., 2006; Melo; Taciana; Fucidji, 2016) as long as it presents less rational aspects (Heiner, 1983; Colinsk, 1996) since decision can be fallible due to cognitive limits (Simon, 1957, 1955; Hammond, 2000; Gerinzer, 2008).

Behavioral studies that present an intercession between Law and other areas (Cestari, 2016) which examine human behavior show that the judge when interpreting and applying the norm is subject to heuristic shortcuts (heuristics) that deviate (bias) from the objective and rational sphere of Law (Horta, 2019; Rezende, 2019; Vitorelli; Almeida, 2021; Andrade, 2019). The decision-making process shows that there are flaws in the process of drawing inferences from certain circumstances (Tumonis, 2012; Frank, 1973; Hutcheson, 1929), which reflect the cognitive limits of the human being himself (Horta, 2019; Rezende, 2019; Vitorelli; Almeida, 2021; Andrade, 2019) and influence the decision-making process of the judge.

In this context, Kahneman and Tversky (1973) present three heuristics that allow us to analyze the judicial decision, based on the process that gave rise to it: representativeness, availability, and anchoring or adjustment. These heuristics stand for shortcuts that people resort to – unconsciously – to simplify the cognitive process of ideals and reality and make decisions based on a case (Vitorelli; Almeida, 2021).

Among the factors that influence judges to make their decisions are political biases (Gomes Neto; Barbosa; Luna, 2021), strategic biases, personal



experiences, party ideology (Alves; Serra, 2019), and meta-procedural factors (i.e., those that go beyond the procedural norms provided for by law), such as the age and religious values of the judge (Abreu; Gouveia; Colares, 2018). These biases can be divided into three principal categories that the literature which the literature on decision-making process calls formal models of judicial behavior explanation: legalistic, attitudinal, and strategic (models); and can be evaluated through variables that relate each of them to the product of individual decisions or collective decisions connected to the same models (Gomes Neto, 2020).

### **3 METHODOLOGY: RESEARCH DESIGN, MATERIAL, AND METHODS**

The research problem is explored empirically with references to the issuance of Preliminary Injunctions (in limine) in Writs of Mandamus — a procedural instrument through which one can protect fundamental rights against abuse of power or illegality committed by a member of the Public Administration.

To answer the same issue, a set of assumptions were made based on the literature view on the judicial decision-making process and were evaluated from a database composed of a sample (size N) of processes concerning writs of mandamus within the jurisdiction of Pernambuco's Federal Court.

The database has a sample (size N) of five hundred (five hundred) actions on civil writs of mandamus, collected from the Universe (U) of 53.006 (fifty thousand and six) actions which were separated into 36 (thirty-six) Federal local Courts, in 2023 period. Since those Federal and local Courts are divided into sections following the object of the action that is submitted to their judgment, it was also applied inclusion criteria (civil actions) and exclusion criteria: civil actions were included in a database while the criminal and tax ones were excluded.

To follow a set of statistics parameters and achieve the research goals (Gomes Neto; Barbosa; Vieira, 2018; Gomes Neto; Barbosa; Paula Filho, 2023, p. 51-52), it was applied a quantitative approach using logistic regression analysis in 218 processes concerning writs of mandamus.

Once the data was collected, a quantitative empirical method by logistic regression (logit) was undertaken to assess the strength of the association between the issuance of preliminary injunctions and these variables: author's profile, subject of litigation, and the granting of free justice benefits. The findings of the estimated econometric models (logit) in this paper are presented in the results section.

## 4 THE INFLUENCE OF PRELIMINARY INJUNCTION (IN LIMINE) IN WRITS OF MANDAMUS WITHIN THE JURISDICTION OF PERNAMBUCO'S FEDERAL COURT: RESULTS OF THE TESTS THROUGH REGRESSION ANALYSIS

What does influence the issuance of Preliminary Injunctions (in limine) in Writs of Mandamus within the jurisdiction of Pernambuco's Federal Court?

The phenomenon of the issuance preliminary injunction in writs of mandamus seems to be associated with a couple of factors that are not strictly related to its rule. Thus, a quantitative examination was conducted with the support of the statistical regression analysis to test, one at time, the strength of the association between the issuance of preliminary injunctions and these variables: author's profile, subject of litigation, and the granting of free justice benefits.

The first test was developed, focusing on the profile of the author that fill the writ with mandamus.

**Table 1:** The issuance of Preliminary Injunctions (in limine) in Writs of Mandamus according to the profile of the author

Model Summary - ISSUANCE OF PRELIMINARY INJUNCTION ▼										
Model	Deviance	AIC	BIC	df	X <sup>2</sup>	p	McFadden R <sup>2</sup>	Nagelkerke R <sup>2</sup>	Tjur R <sup>2</sup>	Cox & Snell R <sup>2</sup>
H <sub>0</sub>	181.855	183.855	187.239	217						
H <sub>1</sub>	169.309	173.309	180.078	216	12.546	< .001	0.069	0.099	0.072	0.056

Coefficients ▼						
	Estimate	Standard Error	z	Wald Test		
				Wald Statistic	df	p
(Intercept)	0.511	0.365	1.399	1.957	1	0.162
X1 (PROFILE OF THE AUTHOR)	1.605	0.435	3.689	13.612	1	< .001

Note. ISSUANCE OF PRELIMINARY INJUNCTION level '1' coded as class 1.

**Note.** The tests proved there is a positive association between the variables. The results for the p-value show statistical significance.

**Source:** author's elaboration based on the original database of this research.

Interpreting the results in the line with estimate coefficient, it is visible that there is a positive (1.605) between the dependent variable (the issuance of the preliminary injunction in writ of mandamus) and the first independent variable: the profile of the author. When it comes to the probability of the occurrence (standard error) of the phenomenon described in the dependent variable mentioned above, it was identified a less chance (0.435) of that the profile of the author influences the concession of the preliminary injunction in writ of mandamus, which means 43.3% odds ratio (in other words, 43.3% of chances of that this event will occur).

This result shows, from the statistical point of view, that the issuance of such procedural mechanism is less associated with the profile of the author (whether it is a citizen or an enterprise). Once the profile of the author does not offer sufficient explanation for the occurrence of the earlier event, what would be the factors that could fill this gap?

It started a second phase of the econometric model and performed a couple of tests focused on the subject of the litigation. As the writ of mandamus is a mechanism which provide a civil protection that can draw upon when Administration, public officials misinterpret the law (among other violations) and violate ascertainable individual or collective rights, it was tested the granting of the preliminary injunction in writ of mandamus whose subject points out to three principal matters of Public Law: Administrative Law, Tax Law and Social Security of Law, that often occupies the judgment within Federal Jurisdiction.

As a follow-up to the regression analysis of this research, it was evaluated the issuance of the preliminary injunction in writ of mandamus in accordance with the Administrative Law.

**Table 2:** The issuance of Preliminary Injunctions (in limine) in Writs of Mandamus concerning the subject of the litigation (Administrative Law)

Model Summary - ISSUANCE OF PRELIMINARY INJUNCTION ▼										
Model	Deviance	AIC	BIC	df	X <sup>2</sup>	p	McFadden R <sup>2</sup>	Nagelkerke R <sup>2</sup>	Tjur R <sup>2</sup>	Cox & Snell R <sup>2</sup>
H <sub>0</sub>	181.855	183.855	187.239	217						
H <sub>1</sub>	168.779	172.779	179.548	216	13.076	< .001	0.072	0.103	0.081	0.058

Coefficients						
	Estimate	Standard Error	z	Wald Test		
				Wald Statistic	df	p
(Intercept)	2.035	0.222	9.178	84.241	1	< .001
X2 (ADMINISTRATIVE LAW)	-1.930	0.510	-3.782	14.306	1	< .001

Note: ISSUANCE OF PRELIMINARY INJUNCTION level '1' coded as class 1.

**Note.** The tests demonstrated there is a negative association between the variables. The results for the p-value indicate statistical significance.

**Source:** author's elaboration based on the original database of this research.

As the Table showed, the estimate coefficient is negative (-1.930), which means that there is no association between the dependent variable (issuance of the preliminary injunction in writ of mandamus) and the independent variable evaluated (Administrative Law). Following the result that the estimate coefficient presented, the odds ratio is irrelevant. Regardless of the statistical significance due to the results for the p-value, it can be concluded that there is no association between that subject of the action and the phenomenon of the concession of the injunction studied.

Keeping in mind the necessity of analyzing the subject of the action to look for further explanation for such behavior, the issuance of the preliminary injunction in writ of mandamus and the Tax Law were also submitted to the econometric regression model that was developed during this research.

**Table 3:** The issuance of Preliminary Injunctions (in limine) in Writs of Mandamus in line with the subject of the litigation (Tax Law)

Model Summary - ISSUANCE OF PRELIMINARY INJUNCTION										
Model	Deviance	AIC	BIC	df	X <sup>2</sup>	p	McFadden R <sup>2</sup>	Nagelkerke R <sup>2</sup>	Tjur R <sup>2</sup>	Cox & Snell R <sup>2</sup>
H <sub>0</sub>	181.855	183.855	187.239	217						
H <sub>1</sub>	167.480	171.480	178.249	216	14.375	< .001	0.079	0.113	0.082	0.064

Coefficients						
	Estimate	Standard Error	z	Wald Test		
				Wald Statistic	df	p
(Intercept)	2.162	0.242	8.923	79.613	1	< .001
X3 (TAX LAW)	-1.682	0.428	-3.929	15.439	1	< .001

Note. ISSUANCE OF PRELIMINARY INJUNCTION level '1' coded as class 1.

**Note.** The tests demonstrated there is a negative association between the variables. The results for the p-value indicate statistical significance.

**Source:** author's elaboration based on the original database of this research.

In this regard, it was possible to see a similar result in comparison to the second test concentrated on administrative matters. The Table above demonstrates a negative estimate coefficient (-1.682), which indicated that the association between the dependent variable assessed (issuance of the preliminary injunction in writ of mandamus) and the independent variable submitted to the same examination model is nonexistent. Likewise, the result for the p-value shows a sufficient statistical significance, however the interpretation of the whole results concludes that there is no association

between the subject of the action studied, and the phenomenon related to the research problem of this paper.

Exploring the same phenomenon through the subjects that often appears in the writ of mandamus's judgment, it was assessed the association between another of the subjects and the issuance of the preliminary injunction. Understanding that the writ of mandamus involves ascertainable individual or collective rights, what other factor related to Public Law could explain it?

When testing the association between the Security Social Law and the event studied, it was seen a different result.

**Table 4:** The issuance of Preliminary Injunctions (in limine) in Writs of Mandamus accordingly with the matter of the litigation (Social Security Law)

Model Summary - ISSUANCE OF PRELIMINARY INJUNCTION ▼											
Model	Deviance	AIC	BIC	df	X <sup>2</sup>	p	McFadden R <sup>2</sup>	Nagelkerke R <sup>2</sup>	Tjur R <sup>2</sup>	Cox & Snell R <sup>2</sup>	
H <sub>0</sub>	181.855	183.855	187.239	217							
H <sub>1</sub>	146.285	150.285	157.054	216	35.570	< .001	0.196	0.266	0.186	0.151	

Coefficients						
	Estimate	Standard Error	z	Wald Test		
				Wald Statistic	df	p
(Intercept)	0.391	0.270	1.448	2.096	1	0.148
X4 (SOCIAL SECURITY LAW)	2.436	0.437	5.580	31.132	1	< .001

Note: ISSUANCE OF PRELIMINARY INJUNCTION level '1' coded as class 1.

**Note.** The tests demonstrated there is a positive association between the variables. The results for the p-value indicate statistical significance.

**Source:** author's elaboration based on the original database of this research.

Once the results of the last test in the line with the subject discussed in the writ of mandamus's actions that composed this research is interpreted, it is visible that there is a positive and medium association between the dependent variable and the independent variable submitted. The estimate coefficient shows a positive association (2.436) while the probability's coefficient shows that there is a 43.7% chance that this phenomenon will happen.

It can be said that the data showed two different kinds of associations concerning the subject of the litigation. On one hand, there is a positive and strong association between the Security Social Law, which means that the application for a preliminary injunction in the writ of mandamus that discusses this matter increases the chances of achieving this result. On the other hand, there is a negative association between the subjects of Tax Law

and Administrative Law, which suggests that the writ of mandamus whose matter approaches these areas reduces with a level of statistical significance the chances of obtaining the preliminary injunction.

The econometric model built also assessed a factor that is connected with the first phase of the writ of mandamus action and the other actions in Brazilian procedure view. In some cases, the author of the litigation (that can be a citizen or an enterprise) makes a request for the granting of free justice benefit in order to avoid the whole expenses of the process. Would the request of such constitutional and infra-constitutional provision influence the judgment, and increase the chances of the issuance of the preliminary injunction within the Jurisdiction of the Federal Court of Pernambuco? To answer, in a complement, this question, it was evaluated the association between this application and the event submitted to the regression.

**Table 5:** The issuance of Preliminary Injunctions (in limine) in Writs of Mandamus in accord with the application for the granting of free justice benefit

Model Summary - ISSUANCE OF PRELIMINARY INJUNCTION ▼										
Model	Deviance	AIC	BIC	df	X <sup>2</sup>	p	McFadden R <sup>2</sup>	Nagelkerke R <sup>2</sup>	Tjur R <sup>2</sup>	Cox & Snell R <sup>2</sup>
H <sub>0</sub>	181.855	183.855	187.239	217						
H <sub>1</sub>	158.690	162.690	169.459	216	23.165	< .001	0.127	0.178	0.124	0.101

#### Coefficients

	Estimate	Standard Error	z	Wald Test		
				Wald Statistic	df	p
(Intercept)	0.521	0.290	1.800	3.240	1	0.072
X7 (FREE JUSTICE BENEFITS)	1.951	0.409	4.769	22.745	1	< .001

Note. ISSUANCE OF PRELIMINARY INJUNCTION level '1' coded as class 1.

**Note.** The tests demonstrated there is a positive association between the variables. The results for the p-value indicate statistical significance.

**Source:** author's elaboration based on the original database of this research.

When assessing the last variable that involves free justice, the statistics demonstrated that there is a positive association between it and the phenomenon. The estimate coefficient shows a positive and strong association (1.951) between the dependent variable (issuance of preliminary injunction in writ of mandamus) and the independent variable (application for free justice benefits). Moreover, the test also demonstrated that there is a medium chance concerning the occurrence of that event: it represents 40% of the chances of receiving the preliminary injunction.

If a citizen fills a writ with mandamus, as a resource to attack a public official decision that violates immediate and ascertainable individual or collective rights, which discuss primarily one of those matters, with an

application for the granting of free justice benefits, it can extend the probability of acquiring the preliminary injunction.

Although it represents a significant quantitative advance in the comprehension of the procedural phenomenon object of this research, the regression analysis (logit) was not able to explain, with more details, the exact reasons behind the behavior of the Federal Judiciary Section of the Federal Justice of the State of Pernambuco. This particular aspect requires a further and isolated examination, through a qualitative method, as far as it follows a bunch of information that involves the reasons whereby judges respond positively to the request of granting or denying such injunctions (Gomes Neto; Silva; Albuquerque, 2024).

## **CONCLUSION**

As has been demonstrated in this paper, other factors can influence the decision-making process of the Federal judges.

Using a regression analysis, it was found that the profile of the author who filed the writ of mandamus, the subject of the action, and the application for the granting of free justice benefits.

First of all, statistics pointed out that there is a positive association between the profile of the author and the issuance of Preliminary Injunctions (in limine) in the Writs of Mandamus. In other words, if the citizen fills a writ with mandamus, it increases the chances of getting such a provision.

The data showed two different kinds of associations concerning the subject of the litigation. On one hand, there is a positive and strong association between the Security Social Law, which means that the application for a preliminary injunction in the writ of mandamus that discusses this matter increases the chances of achieving this result. On the other hand, there is a negative association between the subjects of Tax Law and Administrative Law, which suggests that the writ of mandamus whose matter approaches these areas reduces with a level of statistical significance the chances of obtaining the preliminary injunction.

When testing the last variable that involves free justice, the statistics demonstrated that if a citizen fills a writ with mandamus, as a resource to

attack a public official decision that violates immediate and ascertainable individual or collective rights, which discuss primarily one of those matters, with an application for the granting of free justice benefits, it can extend the probability of acquiring the preliminary injunction.

The empirical-qualitative model developed has indicated the Federal Judiciary Section of the Federal Justice of the State of Pernambuco presents a distinct behavior in comparison with what the literature suggests because the decision on the issuance of the preliminary injunction is associated with other factors that exceed the provision of Brazilian procedure law.

Despite that, this quantitative research was not able to fully comprehend the arguments used by judges to confer or not the preliminary injunction. This aspect requires a deep and detailed examination, through a qualitative method, as far as it follows a bunch of information that involves the reasons whereby judges respond positively to the request of granting or denying such injunctions.

This paper aims to contribute to the studies on Judicial Behavior in Law and Political Science. Considering its theoretical and empirical basis, it is possible to provide, with a considerable statistical level of inference, a more comprehensive understanding of the potential conflicts and violations of clear and indisputable rights that may arise from the improper granting or denial of preliminary injunctions, within the Federal Judiciary Section of the Federal Justice of the State of Pernambuco.

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