

Double standard in the classroom: analysis of socio-semantic categorization networks operated by teachers

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This article analyzes categories operated by bureaucrats when classifying types of users and their effects on the distribution of services, observing contexts of high inequality and universal policies. We analyze how teachers, as street-level bureaucrats, implement the policy by categorizing different types of students. We adopt an analytical lens of cultural schemes, which considers that individuals internalize associations between official and social (informal) categories from their experiences. The analyzed data were collected through vignettes applied to 40 teachers from the municipal education system of São Paulo, Brazil. We analyzed the use of categories through socio-semantic and semantic networks of categorizations and the construction of referral networks. The results show that teachers simultaneously mobilize political and social categories and that the introduction of the variable vulnerability in cases opens space for the introduction of social categories that generate different types of treatment for students with similar behaviors.

Keywords: street-level bureaucrats; categorization; socio-semantic networks; teachers; education.

Dois pesos e duas medidas na sala de aula: análise das redes sociosemânticas de categorização operadas por professores

Este artigo analisa categorias operadas por burocratas ao classificar tipos de usuários e seus efeitos em distribuição de serviços, observando contextos de alta desigualdade e políticas universais. Para tanto, analisa de que modo professores, como burocratas de nível de rua, implementam a política categorizando diferentes tipos de alunos. Adotamos aqui a lente analítica de esquemas culturais, que considera que indivíduos internalizam associações entre categorias oficiais e sociais (informais). Os dados analisados foram coletados de vinhetas aplicadas com 40 professores da rede municipal de São Paulo. Investigamos o uso de categorias por meio de redes sociosemânticas e semânticas de categorizações e construção de cadeias de encaminhamentos. Os resultados apontam que os professores mobilizam de forma concomitante categorias oficiais e sociais, bem como que a introdução da variável “vulnerabilidade” nos casos abre espaço para introdução de categorias sociais que geram diferentes tipos de tratamento para alunos com comportamentos similares.

Palavras-chave: burocratas de nível de rua; categorização; redes sócio semânticas; professores; educação.

Dos pesos y dos medidas en el aula: análisis de redes de categorización sociosemántica operadas por docentes

Este artículo analiza las categorías operadas por los burócratas al clasificar los tipos de usuarios y sus efectos en la distribución de servicios, observando contextos de alta desigualdad y políticas universales. Para ello, analiza cómo los docentes, como burócratas a nivel de calle, implementan la política categorizando diferentes tipos de estudiantes. Adoptamos aquí la lente analítica de los esquemas culturales, que considera que los individuos internalizan las asociaciones entre categorías oficiales y sociales (informales) a partir de sus experiencias. Los datos analizados se recolectaron a través de viñetas aplicadas a 40 docentes de la red municipal de São Paulo. Analizamos el uso de categorías a través de redes sociosemánticas y semánticas de categorización y construcción de redes de referencia. Los resultados muestran que los docentes movilizan simultáneamente categorías políticas y sociales y que la introducción de la variable “vulnerabilidad” en los casos abre espacio para la introducción de categorías sociales que generan diferentes tipos de tratamiento para estudiantes con comportamientos similares.

Palabras clave: burócratas a nivel de calle; categorización; redes sociosemánticas; profesores; educación.

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1. INTRODUCTION

Social policies are based on classifying citizens according to eligibility, benefit levels, and types of service they can access (Mohr, 1994; Schneider & Ingram, 2005; Stone, 2002). Policies are composed of rules that form categories on different types of people attended, dividing the population by need and referrals. Thus, they are a process of constructing institutional identities that determine who receives what (Costa & Lotta, 2021; Møller, 2009).

Despite the normative dimension that organizes the categories of users in the official systems, it is in the daily operation of the policies that the classifications are, in fact, materialized (Lipsky, 2010) through the decisions of State agents who, when faced with real situations, frame citizens in different types of classifications (Harrits & Møller, 2013). One of these agents' main functions, called street-level bureaucrats, is to categorize users in everyday encounters (Lipsky, 2010), transforming individual users into identifiable and allocable customers in official categories and policies (Lipsky, 2010; Lotta, 2019). In the categorization process, bureaucrats interpret real situations by constructing implementation categories that do not exist in official regulations (Møller, 2009) and that may be permeated by stereotypes (Harrits, 2019a).

In the categorization process, bureaucrats are influenced by organizational elements, by the target audience's characteristics, by the bureaucrats' professional training and by profile attributes such as identity, gender and race (Brodkin, 2012; Dubois, 1999; Epp, Maynard-Moody, & Haider-Markel, 2017; Evans, 2010; Harrits, 2019a; Harrits & Møller, 2013; Maynard-Moody & Musheno, 2003; Soss, Fording, & Schram, 2011). However, there are few studies that analyze how the categories used by bureaucrats in the classification of users and delivery of services are constructed (Harrits, 2019a; Maynard-Moody & Musheno, 2003; Møller, 2009). In addition, most of the studies that observed categorization processes analyzed contexts of social welfare with low inequalities (Dubois, 1999; Harrits, 2019a; Møller, 2009; Møller & Stensöta, 2019) or contexts with high inequalities, but without universal public policy systems (Maynard-Moody & Musheno, 2003; Soss et al., 2011). There are few examinations about categorization processes in contexts of high inequality and social welfare systems, such as Brazil.

This article aims to analyze the categories operated by bureaucrats and their effects on distribution of services in the implementation of a universal public policy in a context of high inequality and scarcity of resources. To this end, we used the analytical lens of cultural schemes (Hunzaker & Valentino, 2019) which bear in mind that individuals interact from their experiences and associations between official and social (informal) categories.

The questions guiding the analyses are: is there variation in the type of service provided by bureaucrats in universal policies when there is a perception of unequal socioeconomic conditions among families? How stereotypes inform the categorization process and revert to unequal distribution of services? What are the central categories in the street bureaucrats' speech? How do they mobilize other important categories for the service provision to citizens? In answering these questions, the article will contribute to the literature on categorizations operated by street-level bureaucrats, understanding how categories are constructed, how they are associated with each other and how contexts of high inequality influence this categorization process.

To answer these questions, the article analyzes categorization processes and referrals given by teachers, typical street-level bureaucrats (Lipsky, 2010), operating in the public education network in the city of São Paulo. The article uses different methods: application of vignettes, analysis of categorizations and referrals suggested in vignettes, investigation of socio-spatial and semantic networks of categorizations and construction of referral networks.

The results indicate that teachers simultaneously mobilize official and social categories, especially those based on judgments about types of families and their role in the care of students. They also suggest that the introduction of the variable "vulnerability" in cases opens space for the introduction of social categories that generate different types of treatment for students with similar behaviors. The new types of referral linked to the stigmatizing categories remove the responsibility of the teacher to solve the problem of student behavior.

This article is structured in 5 sections, in addition to this Introduction. In the first one, there are theoretical discussions about the use of categories. In the second, we present the context, data and methods used. In the third, we analyze the case in the light of the categories operated by the teachers. In the fourth section, we expose the discussions in which we answer the research questions. We close with the final considerations.

2. CATEGORIES AND CATEGORIZATIONS IN THE DAILY PERFORMANCE OF STREET LEVEL BUREAUCRACIES

Public policies are made of rules that order users and services delivered to them (Schneider & Ingram, 2005). The differentiations between audiences proposed by the rules of policies are the result of the State's logical behavior, since different people might demand different services. However, in societies based on universal law and equal treatment before the law, different treatment is potentially problematic, generating the need to reconcile equity and universalism, which are democratic ideals, with the differentiation required by policies (Rothstein & Teorell, 2008; Schneider & Ingram, 2005).

This is more critical when considering that the official categories proposed by the policies are never operated automatically, because they depend on the actions of State agents to be implemented (Møller, 2009). These agents, widely studied by the literature of street-level bureaucracy (SLB), have as one of their primary functions to transform generic rules into concrete actions based on daily encounters with users (Lipsky, 2010; Prottas, 1979).

Street-level bureaucrats are conceptualized as those professionals who implement policies in direct contact with users, such as teachers, police officers and health professionals, among others (Lipsky, 2010; Lotta, 2015). Policies materialize by the action of bureaucrats who interact with users, providing goods, services and sanctions (Fassin, 2015). The action of SLB is marked by high discretion, given the distance of the formulators and the low capacity of control and predictability of their actions

(Lipsky, 2010). It is in the operation of the official categories in practice that the SLB determine who receives what, how much and where (Lipsky, 2010; Lotta, 2015; Oorschot, 2008).

Thus, in addition to the difficulties inherent to the construction of official categories that need to reconcile universalism with differentiation, the categorization process is still subject to the SLB action that interact with users and, in daily meetings, reinterpret and recreate categories proposed by policies to be able to frame the real cases they find (Lipsky, 2010; Møller, 2009).

The process of categorizing users operated by SLB can be formal, based on official categories, such as age. But it can also be informal, based on social categories (Harrits & Møller, 2011) created in meetings between users and bureaucrats, when they need to distinguish between types of users and deliveries in a more granular way than the rules allow (Zacka, 2017) – such as gender, degree of vulnerability, poverty, etc. In these situations, when the official categories do not account for the complexity of real cases, bureaucrats need to fill the gap between the rules and the situations they encounter. This process is not an isolated aberration created by a single bureaucrat, but it can be understood as a collective response, disseminated and legitimized among peers, through exemplary cases, and sensitive to real problems caused by mismatches between the official and the practical (Zacka, 2017).

Bureaucrats identify and categorize citizens based on implicit observations and feelings about the world and situations, in which common sense, stereotypes and prejudices often prevail (Harrits, 2019a; Harrits & Møller, 2013). To categorize situations, they mobilize the official discourses emanating from the policies and moral and social conceptions acquired in their social life and that become perceptions about what is or is not acceptable (Dubois, 1999; Lotta & Pires, 2019; Zacka, 2017). Part of the literature has been dedicated to understanding what factors influence the categorization process operated by bureaucrats. The literature shows that the attribution of social and political categories is influenced by various elements, such as the bureaucrats' identity and profile, organizational contexts and target audience characteristics (Epp et al., 2017; Harrits & Møller, 2013; Maynard-Moddy & Musheno, 2003).

The categories operated in the policies are symbolic constructions that contain ideological and codified assumptions regarding different social roles, types of needs and degrees of merit (Mohr, 1994; Schneider & Ingram, 2005). They are sources of citizens differentiation legitimacy (Schneider & Ingram, 2005), which, in general, are rooted in society and produce consequences for the ways in which they are treated by the State (Mohr, 1994; Møller & Stensonta, 2019; Zacka, 2017). As access to the State depends on the institutional location within the categories (Mohr, 1994), they produce citizenship and legitimacy (Zacka, 2017), identifying an individual as a needs holder, capable of making demands and bearer of certain rights (Mohr, 1994).

By building differentiations, the processes of policy categorization form groups with different degrees of merit and, at the same time, those included and excluded, those who access and those who are marginalized, institutionalizing social, economic and political divides (Schneider & Ingram, 2005). Such categorizations can be permeated by social stereotypes and produce skewed treatment, which creates injustice and unequal access (Harrits, 2019a).

The categorization processes can therefore generate different effects, determining access and eligibility, which causes differentiated material distribution (Pires, 2019). Similarly, they can have symbolic effects, building stigmas (Harrits, 2019a), marginal groups (Schneider & Ingram, 2005) and perceptions about how the State treats its citizens (Zacka, 2017). They may also have cumulative effects that are reflected in users' perceptions about themselves (Maynard-Moody & Musheno, 2015; Oliveira & Carvalho, 2019), especially when they are marked by the active use of social stereotypes

(Harrits, 2019a). Finally, categorization processes imply perceptions about justice and legitimacy. The different categories among users with similar situations or needs generate, for citizens, the perception of unfair treatment and State partiality. These components can affect State legitimacy (Rothstein, 1998).

Taking into account the importance of social elements in the categorization process, in this article we use as analytical lens the “cultural schemes” (Hunzaker & Valentino, 2019), which help explain why different contextual elements can trigger specific categories. Cultural schemes are “sets of cognitive associations, developed from repeated experiences, which represent information and facilitate interpretation and action” (Hunzaker & Valentino, 2019). As part of cognitive sociology, cultural schemes are associated with individual cognition, which is influenced by the set of experiences. They are the result of the “internalization of cognitive association networks” (Hunzaker & Valentino, 2019). However, the cultural aspect indicates that are shared by several individuals, thanks to experiences lived collectively, narratives and shared practices (Schudson, 1989).

Cultural schemes are based on “connective models” (D’Andrade, 2005; Strauss & Quinn, 1997). It is possible to illustrate the connectionism with the following example: when an individual perceives x in a situation, he/she assumes that y is also associated with it, even if it is not present. Proponents of the connectional models explain that individuals add assumptions to allow interpretation of situations. In this way, the concepts can be conceived as articulated in the same “scheme” (Strauss & Quinn, 1997). Cultural schemes depend on external activation to the individual. Depending on the context, different associations are activated (Strauss & Quinn, 1997). Following the connectionist intuition of cultural schemes, in this article we propose going beyond the study of pairs of categories and exploring cultural schemes as related concepts in more complex structures. Thus, it is possible to express cultural schemes as “semantic networks” and analyze these semantic networks based on the set of tools developed by the analysis of semantic networks (Basov et al., 2020).

Following Fuhse, Stuhler, Riebling, and Martin (2020), we would like to suggest the following nomenclature for various types of networks: the social ones are those in which the knots are social actors – for example, individuals, organizations or States –; the semantic ones include only concepts – for example, words –; the sociosemantic ones associate people with concepts. Some analysts also call sociosemantic networks “epistemic networks”, because they express how individuals mobilize concepts (Roth & Cointet, 2010).

For the analysis of semantic networks, it has been common to take some techniques of social network analysis, such as the idea of centrality. For instance, Ghaziani and Balsassarri (2011) propose the idea of “cultural anchors”, which are as central in the discourse of a discursive community. In this text, we will detail below how we recover the closeness centrality and the analysis of center-periphery to analyze semantic and sociosemantic networks of the categories used by the SLB. We believe that the identification of the SLB’s cultural anchors can bring to students of public policies, as well as to public policy formulators, subsidies to deepen the connection between individual cultural aspects and practices effectively mobilized. Although the connection between individual culture and practice is widely suggested in the literature, the conception of individual culture as a relational cognitive scheme may suggest that interventions should not focus on specific beliefs, but rather on articulated systems of beliefs and values (Lewandowsky, Ecker, Seifert, Schwarz, & Cook, 2012).

3. CONTEXT, DATA AND METHODS

3.1 Context and Data Collection

In order to fulfill the objective of analyzing the categorization process operated by SLBs in contexts of high inequality, we chose to study public school teachers in Brazil. This choice was made because teachers are a typical example of SLB (Lipsky, 2010) widely studied by North American and European literature. In the Brazilian case, they act in a context of high inequality, implementing a universal policy.

In this article, we analyze the categories operated by teachers from different schools and teaching levels to verify how categorization differentiates types of students and organizes referrals. The categories were analyzed considering cultural schemes. Four municipal schools from São Paulo, the largest city in the country and marked by high levels of inequality, were chosen. The choice for these schools was based on those that had, at the same time, elementary and high school. This would reduce context variation when contemplating teachers of different levels in interviews. The municipal network has 8 schools of this type. For the selection, 4 types of schools were classified, with high/low academic performance – according to the national average of the Basic Education Development Index (Ideb) – and homogeneous/heterogeneous in terms of race and gender. All of them are in peripheral areas of the city marked by high vulnerability. Box 1 systematizes the differences between the selected schools.

BOX 1 SCHOOLS' CHARACTERISTICS

School	Performance	Degree of homogeneity
School 1	Academic performance above the national average	Homogeneous
School 2	Academic performance above the national average	Heterogeneous
School 3	Academic performance below the national average	Homogeneous
School 4	Academic performance below the national average	Heterogeneous

Source: Elaborated by the authors.

The approach in each school took place via contact with the Principal, after approval by the Municipal Department of Education. In each of them, we invited 10 volunteer teachers to participate in the research, 5 of elementary school (EF) and 5 high school teachers (EM). A total of 40 teachers, 10 from each school and 20 from each level of education were interviewed. Respondents have a profile variation (Annex 1).

For data collection, semi-structured interviews were conducted with each of the teachers. They were based, first, on questions that raised the teachers’ trajectory. The questions served to construct teachers’ attributes and to understand their variation in terms of gender, age, training and experience (Annex 2). In the second part of the interviews, we applied vignettes, which are a semi-experimental method defined as “short stories about hypothetical characteristics in specific circumstances to which respondents are invited to respond” (Finch, 1987).

Vignettes seek to present to the interviewees authentic situations or real dilemmas through which researchers can understand behavior and construction of senses (Harrits, 2019b). In street-level bureaucracy studies, they are used to understand beliefs, preferences, and attitudes (Harrits, 2019b). Its application allows the comparison of bureaucrats’ reaction to the same real situation even though they are in different contexts. For this research, 6 vignettes were designed: 3 with appropriate situations for elementary school and 3 for high school.

In addition, there were 2 control vignettes – 1 for EF and 1 for EM – and 4 test ones, – 2 for EF and 2 for EM. The control vignettes were constructed based on a daily situation experienced by teachers and that did not test vulnerability condition or social class. The 4 test vignettes were built with the aim of testing the effect of evaluating socioeconomic conditions on teachers’ performance. The variation tested took into account the type of family and the parents’ socioeconomic status. The alternation of names was also purposeful in order to denote families with different vulnerability conditions. The two vignettes had the same behavior problem – a student who loses interest in school –, but ambiguously. Thus, teachers could understand that the loss of interest could have varied motivations. The vignettes were developed based on previous interviews with teachers in which critical situations of their work were mapped. After their design, they were tested with 3 teachers and are summarized in Box 2, where we briefly describe the EF and EM vignettes. In addition, they are presented in full in Annex 3.

BOX 2 VIGNETTES’ COMPARATIVE SUMMARY

Control vignette	Vignette 1: structured family	Vignette 2: unstructured family
Student name: Gustavo (EM), Lucas (EF). Marital status: married, 1 child. Parents’ employment: nurse and teacher. Problems at school: messy and funny student. He gets bad grades and does not do assignments. Parents do not know what to do.	Student name: Lucas (EM), Robson (EF). Marital status: married, 3 children. Parents’ employment: hired maid and construction worker. Problems at school: popular student with a dominant role among peers. Behavior has changed recently: arrives late, is angry and does not want to participate in school activities. Performance has dropped. Parents do not know what to do. Specific for EM: Lucas misses the classes to talk to friends outside school.	Student name: Daivisson (EM), Jonathan (EF). Marital status: single mother, 4 children raised without a father. Mother’s employment: informal cleaner. Problems at school: popular student with a dominant role among peers. Behavior has changed recently: arrives late, is angry and does not want to participate in school activities. Performance has dropped. Parents do not know what to do. Specific for EM: Daivisson misses the classes to talk to friends outside school.

Source: Elaborated by the authors.

The vignettes were presented to the teachers at the end of the interviews. All teachers responded, first, to the control vignette. Then, they responded to one of the specific vignettes, randomly selected. Therefore, there were 80 vignettes answered, 40 of which were control, 20 of family less vulnerable and 20 of the most vulnerable family. In each school, half of the respondents answered each of the vignettes. The 80 vignettes are the basis of the analyses presented here, which were carried out by combining the responses to the EF and EM vignettes.

3.2 Analysis Method

To analyze the field material, all interviews were transcribed and coded in the NVivo software. Here, we present the analyses referring only to the 80 vignettes answered. The material went through 3 coding phases. The first was the macrocodes of the interviews – categories used, suggested referrals. The second was a *grounded* to find categorizations and referrals operated by teachers to appoint students and forms of treatment. In this phase, 44 categorizations and 13 types of referral were identified. In the third, we regrouped the categorizations and new more comprehensive codes, which generated 24 categorizations and 13 referrals. The categorizations were grouped into 4 types: behavior, pathological, social class and family. Annex 4 presents the codes used and the categorizations grouped together. All interviews were coded by 2 different researchers in order to ensure the validity of the codes used. When there were doubts or dissent, the codifications were revised.

After coding, we built a framework to identify which teachers mobilized each category and type of referral – 0 for non-mobilization and 1 for mobilization. After the coding processes, the sociosemantic networks of categories and referrals were analyzed.

We built 4 “affiliation” networks in which the lines are the cases – vignettes analyzed by teachers – and the columns are the categories and the referrals. These affiliation networks are sociosemantic since they combine individuals and categories. The original 4 corresponded to the 3 proposed vignettes and the combination of all of them – networks shown in Figures 1 to 4 in the next section. For each of these networks, we generated the center and periphery analysis, which seeks to identify the densest region, which would be the center of the network (Borgatti, Everett, & Freeman, 2002). On the other hand, the rest of the network, less dense, is identified as the periphery (see Box 4 in the next section). This analysis allows us to identify categories and referrals that belong to the center of each network.

We decided on the idea of center/periphery in order to analyze the sociosemantic networks (Frigotto & Riccaboni, 2011). The center indicates which categories belong to the densest region of the cultural scheme shared by individuals and, therefore, express the set of predominant categories in a social environment (Box 4).

For the purpose of visualization and calculation of centrality of each category and referral, we transformed the sociosemantic networks into “square” – coincidence of entities in rows and columns. This transformation was performed by the sum of the vector product and normalized by the inverse of the total number of cases per category. With these semantic networks, 4 visualizations were generated (Figures 1 to 4) and the closeness centrality of categories and referrals was calculated (Box 5). Centrality captures the proximity of a concept to all other concepts of a network and has been used by analysts to represent conceptual proximity (Godart & Claes, 2017). We will use closeness centralities as a complementary way to the center/periphery analysis described above.

Finally, we replicated the analyses described by separating EF and EM teachers. The purpose of these supplementary tests is to explore whether the identified evidence is accentuated according to the place where teachers are allocated.

4. RESULTS

The analyses are presented here based on 3 elements. First, we detail the use of official and social categories in the different vignettes, seeking to identify to what extent teachers trigger categories that are outside official policy to interpret a case. Next, we present the semantic networks of use of categories and referrals, comparing the different vignettes to verify to what extent similar cases triggered different categories. In these analyses, we observed the inclusion of categories in the center/periphery of networks (Box 4) and the measures of closeness centralities of categories and referrals (Box 5). Finally, we present the comparison between test vignettes to understand how teachers interpret and think alternative solutions to similar behavior problems, which would help answer the research question.

4.1 Use of social and official categories

The first analysis sought to capture the official and social categories mobilized by teachers to classify students who appeared in the situations. Box 3 shows the incidence of the use of official and social categories by teachers in vignettes.

BOX 3 INCIDENCE OF THE USE OF OFFICIAL AND SOCIAL CATEGORIES

Official categories		Social categories	
Learning difficulties	3%	Unsupported family	20%
Lack of focus	14%	Family without discipline	11%
Problematic	13%	Social class	7%
Intelligent	5%	Aggressive	2%
Inquisitive	1%	Drug user	4%
Learning pathology	5%	Unstructured family	4%
Obedient	3%	Structured family	3%
		Boastful	2%
		Drugged family	2%
		Needy	1%
Total	44%	Total	56%

The categories were identified in a *grounded* way based on the interviews. The percentages correspond to the incidence of each type of category in the total number of interviews (80).

Source: Elaborated by the authors.

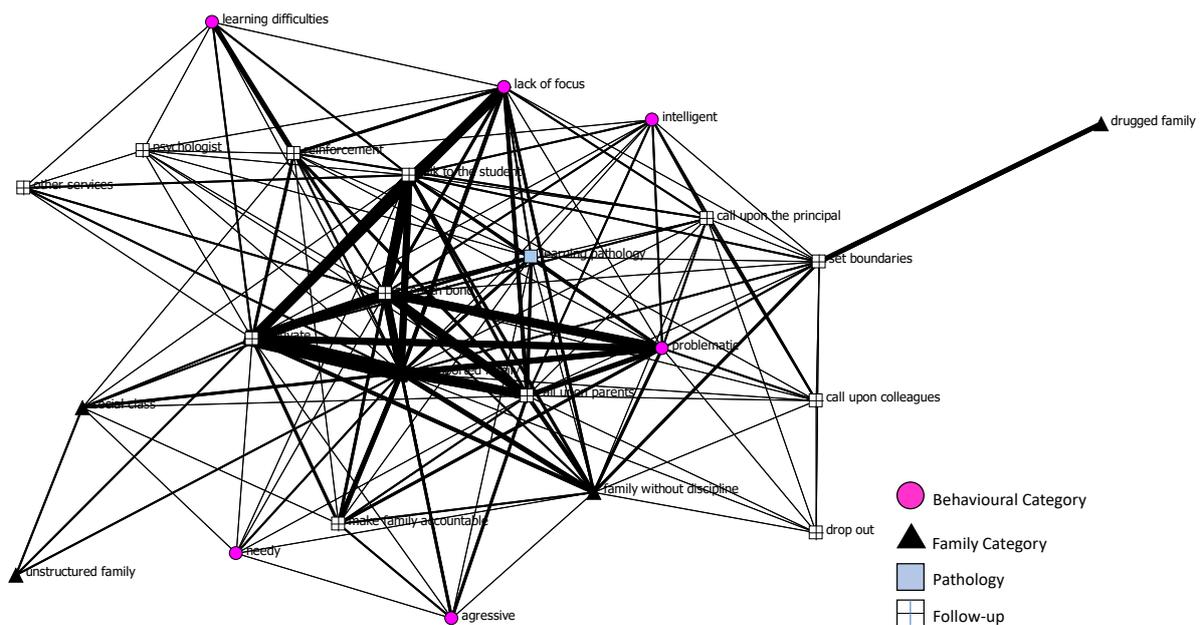
Box 3 suggests that, in the classification that teachers use on students, different types of categories are mobilized, both official and social. The first are those that appear in public policies, such as the distinction between disciplined and undisciplined student, who does not pay attention, who learns, among others. The second ones are those that are not official in politics but are mobilized by teachers to classify real cases. In them, the categories about family types, social class, aggressive student, drug user, among others.

Box 3 also shows a prevalence of use of social categories by teachers – 44% against 56% –, although the difference is small. In addition, part of the social categories used is based on stereotypes, especially the idea of a structured and unstructured family, of a boastful student, of a drugged family. That is, as pointed out by previous research, the social categories mobilized by teachers to classify types of students are permeated by stereotypes activated in the interpretation of real cases (Harrits, 2019a).

4.2 Semantic networks of Categorizations and Referrals

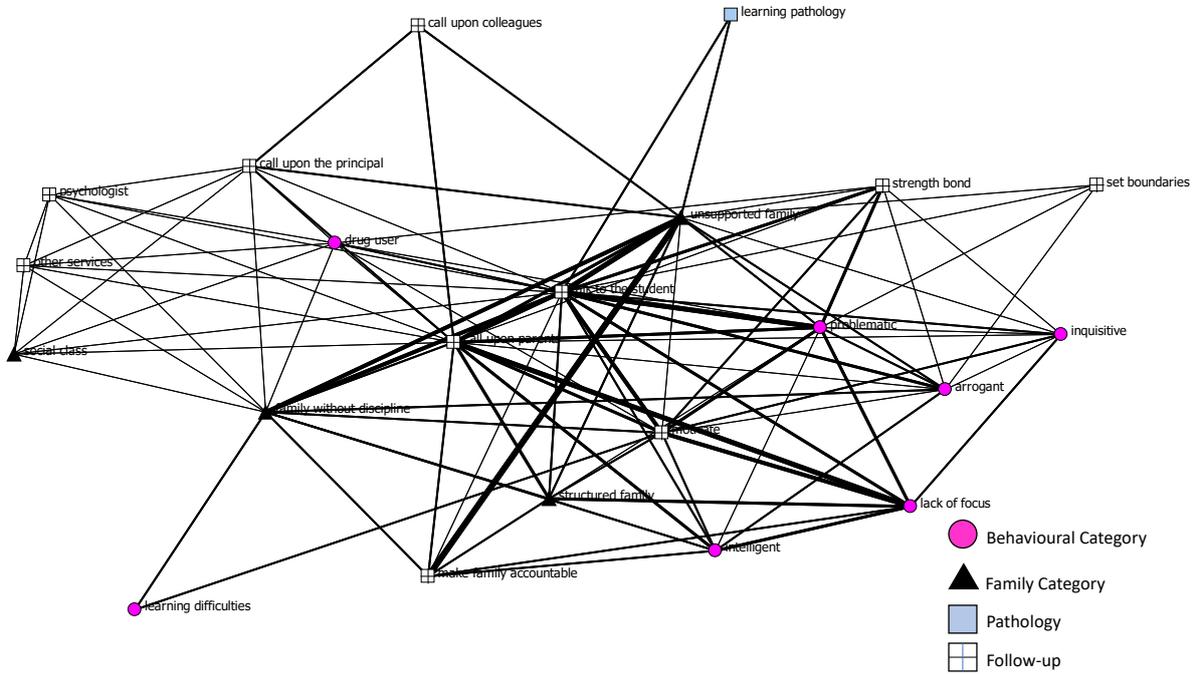
In addition to the incidence of social and official categories, we analyzed the structure of semantic networks constructed by teachers to categorize the different types of students. Figures 1 to 3 demonstrate the semantic network of each vignette. Figure 4, the semantic network uniting all vignettes. In addition to the visualization of the networks' sociogram, we obtained quantitative measures that would allow identifying their characteristics. One of the central elements was the analysis of categories and referrals that belong to the center of each network (Box 5), that is, those that mobilize the other categories and referrals used.

FIGURE 1 SEMANTIC NETWORK OF THE CONTROL VIGNETTE



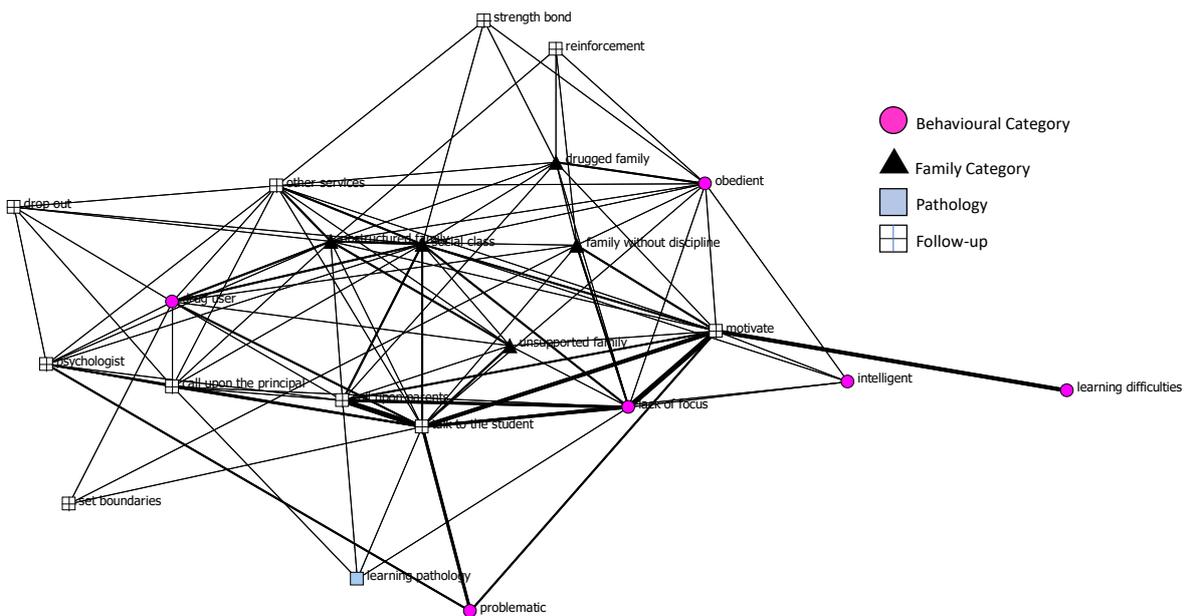
Source: Elaborated by the authors based on the coding of the control vignette.

FIGURE 2 SEMANTIC NETWORK OF VIGNETTE 1 (LOW VULNERABILITY)



Source: Elaborated by the authors based on the coding of the vignette 1.

FIGURE 3 SEMANTIC NETWORK OF VIGNETTE 2 (HIGH VULNERABILITY)



Source: Elaborated by the authors based on the coding of the vignette 2.

BOX 4 CATEGORIES OF SEMANTIC NETWORK CENTERS

	Control Vignette	Vignette 1 - Less Vulnerable Family	Vignettes 2 - Most Vulnerable Family	All Vignettes
'Core' categories (behavior)	<i>Problematic</i> <i>Unsupported family</i> <i>Family without discipline</i>	<i>Problematic</i> <i>Unsupported family</i> <i>Lack of focus</i>	<i>Problematic</i> <i>Unsupported family</i> <i>Family without discipline</i> <i>Lack of focus</i> Obedient Drug user Unstructured family Drugged family Social class	<i>Unsupported family</i> <i>Lack of focus</i>
'Core' categories (referrals)	<i>Call upon parents</i> <i>Talk to the student</i> <i>Motivate</i> <i>Build bond</i>	<i>Call upon parents</i> <i>Talk to the student</i> <i>Motivate</i>	<i>Call upon parents</i> <i>Talk to the student</i> <i>Motivate</i> Call upon the principal Psychologist Other services	<i>Call upon parents</i> <i>Talk to the student</i> <i>Motivate</i> <i>Build bond</i>
Core Density	57%	57%	40%	44%
Fitness measures	0,537	0,544	0,468	0,444

Caption:

Italic: common categories to other vignettes.

Bold: unique categories to vignette.

Source: Elaborated by the authors.

In Box 5, panel A, we present the main categories according to the closeness centrality from the semantic networks of each set of vignettes. The closeness centrality in semantic networks has been interpreted as a “cultural anchor”, because it allows the identification of concepts close to the others (Ghaziani & Baldassarri, 2011). For each set of vignettes, just below (panel B), we present the ranking of each category, according to the closeness centrality. The categories included were among the top 5 in at least 1 set of vignettes.

BOX 5 CLOSENNESS CENTRALITY, OBTAINED BASED ON SQUARE SEMANTIC NETWORKS

Closeness por vinheta (painel A)				
Categories	All Vignettes	Control Vignettes	Vignettes 1	Vignettes 2
<i>Family without discipline</i>	0,046	0,040	0,042	0,039
<i>Unsupported family</i>	0,045	0,047	0,042	0,039
<i>Intelligent</i>	0,035	0,037	0,039	0,037
<i>Unstructured family</i>	0,032	0,032	0,021	0,043
<i>Social class</i>	0,036	0,035	0,037	0,044
<i>Motivate</i>	0,043	0,043	0,041	0,042
<i>Obedient</i>	0,030	0,018	0,021	0,041
<i>Build bond</i>	0,043	0,045	0,038	0,034
<i>Talk to the student</i>	0,042	0,042	0,046	0,044
<i>Call upon parents</i>	0,045	0,044	0,045	0,041
<i>Other Services</i>	0,033	0,034	0,037	0,041

Ranqueamento das categorias por closeness (painel B)				
Categories	All Vignettes	Control Vignettes	Vignettes 1	Vignettes 2
<i>Family without discipline</i>	1	6	3	11
<i>Unsupported family</i>	2	1	3	13
<i>Intelligent</i>	11	13	9	15
<i>Unstructured family</i>	17	23	23	3
<i>Social class</i>	9	17	15	2
<i>Motivate</i>	4	4	5	4
<i>Obedient</i>	21	25	23	6
<i>Build bond</i>	4	2	12	21
<i>Talk to the student</i>	6	5	1	1
<i>Call upon parents</i>	2	3	2	6
<i>Other Services</i>	14	22	15	5

The highlighted numbers denote the ranking of the categories that were among the five most central.

Source: Elaborated by the authors based on network measures.

4.3 Categorizations, Referrals, and Vulnerabilities

The control vignette presented a common case for teachers' lives: a student with common, but not serious, behavior problems. It had two purposes. The first was to map the categorizations and the most standard/common referrals of teachers' lives, considering that it is a "common" case. The second was to serve as a control for the testing of the other vignettes and, therefore, to verify if there would be much variation among the teachers.

In this vignette, we found out that central categories mobilize the others: "problematic student", "unsupported family", "family without discipline" (Box 4, vignette 1). What such categorizations suggest is that common behavior problems are named as problematic (or undisciplined or messy), but it usually appears in conjunction with a classification of the types of families that produce students with this profile: those who do not provide support the school and those who do not discipline students. The categorization of indiscipline is usually mobilized in conjunction with the classification of family behaviors that impair the students' good behavior, which shows the centrality of the family dimension for the categorization of students' behavior.

In vignette 1, where there is a more pronounced behavior problem but the family is presented as less vulnerable, the central categories are: "problematic student", "unsupported family", "family without discipline" and "lack of focus" (Box 4, vignette 1). The categories "family without discipline" and "unsupported family" also presented high closeness centrality (Box 5, Panel B). The only difference between this vignette and the control vignette is the introduction of the categorization "lack of focus", which denotes a disinterested student, who does not pay attention and is not concerned with learning. However, the categories related to the family remain central, reinforcing the finding that the family is responsible for the student's behavior.

Quite different is the situation that appears in vignette 2, in which the case of the most vulnerable family is presented, although with the same behavior problem of the test vignette 1. In it, in addition to the categories that had appeared before ("problematic student", "unsupported family", "family without discipline" and "lack of focus"), 5 more appear: "obedient student", "drug user", "unstructured family", "drugged family" and "social class" (Box 4, vignette 2). Among these added categories, "unstructured family" and "social class" were important, according to the closeness centrality (Box 5, Panel B).

In the case of vignette 2, once again, as in the other cases, the categorization on families is central to explain how teachers classify the students' behavior. But the differences in the vignette bring to light the dimension of vulnerability of that family and issues related to class. Without this being proposed, the *drug* issue presents itself as central to classify both the student and the family. The idea of an *unstructured family* gains centrality, and the issue of *poverty and vulnerability* are associated with the other categories (Box 4, vignette 2).

The centrality of the categories "unstructured family" and "social class" was reinforced by the analysis of closeness centrality (Box 5, Panel B). Thus, although the family dimension is important in all 3 vignettes, there are differences in how they are viewed, categorized, and how their responsibility is considered in the case analysis. The use of the categories in this vignette, as opposed to the other two, demonstrates how the introduction of elements related to vulnerability changes the classifications that teachers use for the case, even if the behavior is similar. This suggests that the conditions of vulnerability change the categories used and bring to the service categories traditionally unrelated

to education, such as drugs and social class. Particular attention should be paid to the use of the “obedient” category as central. A hypothesis may be the place of passivity and lack of agency to which teachers attribute the student, who is subject to family and social determinants.

In addition to verifying how categorizations are affected by vulnerability conditions, vignettes sought to understand the extent to which different categorizations change the types of referrals. In the 3 situations, the central referrals were: “call upon parents”, “talk to the student” and “motivate”, which means developing specific activities for the student to be interested in school (Box 4).

The centrality of the 3 referral categories was confirmed by the closeness centrality analysis (Box 5). These activities represent those under the responsibility of the teacher’s direct action. They also correspond to the belief that a solution is possible within the scope of the school and the teacher’s responsibility, either by calling upon the parents, or involving the student in the solution. The difference between such actions lies in the belief of the students’ ability to solve their problems or the need for family involvement.

There is, however, a difference in the test 2 vignette, in which 3 other types of referral are added: call upon the principal, referral to a psychologist and calling upon other services outside of school, such as Psychosocial Care Center – Alcohol and Drugs (Caps/AD), Tutelary Council and Reference Center for Social Assistance (Cras) (Box 4, vignette 2). The category “calling upon other services outside the school” was confirmed as important in the analysis of closeness centrality (Box 5). That is, the condition of vulnerability included in the vignette not only makes more complex the categorization made on the student, incorporating extra-school elements, but also brought to the referral additional services that look out of the educational process and remove from the teacher the responsibility of solving the case. By suggesting the relationship with drugs (of the student and the family) and referral to Caps/AD or Guardianship Council, the teacher throws to external services the responsibility for resolving the student’s poor behavior.

4.4 Differences between Elementary and High School Teachers

In order to verify whether there would be a difference in the categorization process operated by teachers of different educational levels, we performed additional analyses in order to compare the categories used by EF and EM teachers. We identified the central categories for these two types of teachers within each vignette (see Annex 5 for full analyses).

Originally, based on the center/periphery analysis of the set of vignettes 1, we identified the categories “problematic student”, “unsupported family”, “family without discipline” and “lack of focus” as central. When analyzing vignette 1 disaggregated by level, we noticed that the category “unsupported family” is repeated among EF and EM teachers. The category “lack of focus” emerged as central only among EF teachers. “Family without discipline” and “problematic student” have emerged as central among EM teachers. “Family without discipline” is also central in this vignette among EM teachers.

In vignette 1’s original analysis, “calling upon parents”, “talk to the student” and “motivate” emerged as central referral categories. When we examine the analyses disaggregated by level of education, these original categories reappear. However, EF teachers also present “hold parents accountable”, while those of the EM present “call upon the principal” and “build bond” as central.

The vignette 2's center/periphery analysis revealed as central categories "problematic student", "unsupported family", "family without discipline", "lack of focus", "obedient student", "drug user", "unstructured family", "drugged family" and "social class". The analysis disaggregated by level of education revealed a smaller list of categories – Only "social class" is repeated among EF and EM teachers. It is interesting to also note the differences: EF teachers have "lack of focus" as an additional category in this vignette. In contrast, EM teachers present "drug user" and "unstructured family" as additional categories to the "social class".

In the vignette 2's original analysis, 6 referral categories emerged as central: "call upon parents", "talk to the student", "motivate", "call upon the principal", "referral to psychologist" and "call upon other services outside the school". When we disaggregate the analysis by level of education, the list of categories is reduced – only "talk to the student" is common among EF and EM teachers. However, examining the unique categories of each level of education reveals an important contrast. EF teachers consider "talking to parents" and "motivate" as additional referral categories to "talk to the student". In contrast, EM teachers' responses add "other services" and "psychologist" to the category "talk to the student", both are also identified as central in the closeness centrality analysis.

The comparative data between EF and EM teachers suggest that, in general, the differences between vignettes 1 and 2 are accentuated among EM teachers, who introduced in the vignette 2 more stereotyped categories and referral proposals that extend beyond the school walls.

5. DISCUSSIONS

In this section, we will resume the research questions in light of the results found. The first was whether there would be variation in the type of service provided by bureaucrats in universal policies when there is a perception of unequal socioeconomic conditions among families. The second concerned stereotypes that informed the categorization process. The third sought to understand the central categories used by street-level bureaucrats. The fourth was about how categories were mobilized in the services provision.

To answer the first question, the results suggest that there is, in fact, a variation in the services' delivery. The introduction of the socioeconomic condition component changed the way bureaucrats suggested referrals to the cases. The main change is to call upon out-of-school services for the vignette with more vulnerable conditions. In this case, in addition to calling upon parents looking for ways to motivate the student, teachers call and refer to other services outside the school, denoting a more complex case than the school can treat and that depends on the action of the guardianship council, psychologists, Caps, among others.

In the case of the vignette in a condition of less vulnerability, the referral is circumscribed to the school walls. Another important difference is in the low centrality of the idea of triggering bonds for the second vignette, while it has centrality in the first. That is, in the case of less vulnerability, it is possible to reestablish bonds, a strategy that is not central in the second vignette.

These differences in referrals occur by the way teachers interpret and categorize each of the situations and the use of stereotypes in them, which answers the second and third questions. The results show that, in the case of the vignette with the most vulnerable situation, teachers introduce stereotyped categories, associating the case with drug abuse (by the student and the family) and

with the idea of a structured family. These categories are based on stereotypes about what is a poor young man with different behavior within the school. By contextualizing the type of family, teachers automatically triggered stereotypes that were not in the case to categorize the young person and think about the types of referral. It is interesting to note that this did not happen with the vignette of less vulnerable situations. It is also important to note that, when disaggregated by level of education, stereotyped categories appear more strongly among EM teachers than among EF teachers.

Finally, the centrality of stereotyped social categories that are associated with different types of referrals is an element that answers the research questions and suggests how, in contexts of high inequality, street-level bureaucrats use stereotyped categories, not present in the case or in politics, to decide who receives what.

6. FINAL CONSIDERATIONS

This article aimed to analyze categorization processes operated by a bureaucracy and its effects in terms of services distribution in the implementation of a universal public policy in a context of high inequality and scarcity of resources. Based on an experiment with vignettes, the article analyzed how the manipulation of variables related to students' vulnerability alters the categories mobilized by teachers and the referrals suggested for cases of similar behavior. The analyses allowed to reinforce findings of other research that teachers, as well as other STREET-LEVEL BUREAUCRATS, mobilize simultaneously in their practice, permeating the implementation of discretionary decisions that alter both the categories mobilized and the referrals given based on them (Harrits & Moller, 2011; Maynard-Moody & Musheno, 2003).

Our analyses, however, suggest that the categorizations about families gain centrality in the daily judgments that teachers make about students and educational processes. Students' problematic behavior is explained, centrally, by how families are perceived as taking responsibility (or not) in relation to discipline and school assistance. The semantic and network analysis allowed us to see the structural centrality of the categories on families to mobilize the others. That is, the categorizations on families are strongly associated with the other categories used to judge students. In addition, the data suggest that the judgment on the family is often accompanied by the class dimension when the vulnerability variable is introduced, an element that had not emerged in previous studies.

Still, the comparison between the test vignettes demonstrated how the introduction of the variable "vulnerability" actually altered categorizations and referrals made by bureaucrats. By suggesting common behavior problems in students from different families, vignettes allowed us to see how teachers introduce, in the most vulnerable case, aspects that go beyond classroom situations and are elements related to stereotypes about students from vulnerable families.

Previous research has shown how the class dimension introduces stigmatizing categories in judgments made by STREET-LEVEL BUREAUCRATS (Harrits, 2019a) and how teachers operate social categories and stereotypes in the classroom which are linked to race and disability and result in unequal treatment of students (Botelho, Madeira, & Rangel, 2015; Lareau, 2003; Nunes & Lomonaco, 2010). In our case, however, teachers cited categories external to the typical domain of education. The introduction of categorizations related to drug abuse was the most evident, demonstrating how there is activation of social stereotypes.

The results suggested that the referrals given to the cases change according to the judgments. By associating the most vulnerable case with problems such as drug abuse and class issues, teachers shift the case to a situation beyond their responsibility and sometimes the school walls. This means that, in addition to activating social stereotypes, the dimension of vulnerability shifts the scope of the situation, producing differences in the referrals made by the school.

These findings suggest that there is variation in the type of service provided by STREET-LEVEL BUREAUCRATS in universal policies when there is a perception of unequal socioeconomic conditions among families. They also suggest that categorization processes are affected when there is variation in situations of vulnerability, to the extent that they activate social stereotypes that bring other types of social categories to the judgement and referral made by bureaucrats.

This article contributes to some theoretical-methodological and empirical innovations. Regarding the theoretical-methodological dimension, the text advanced by performing a combination of methods in bureaucracy research: an experiment with vignette combined with semantic analysis and structural analysis of the networks. Thus, it allowed us to understand how the categories are mobilized and related to certain policy *outcomes*, in addition to raising structural centrality of some categories and referrals.

Empirical innovation is to study a different context from international literature – a universal policy implemented in a context of high inequality and scarcity of resources. The greater criticality of the context may help to explain why, in the cases analyzed, the categorization is stereotyped, as found in other studies (Harrits, 2019a), and why the referrals take the cases out of the limits of education policy, taking the responsibility off the school in resolving them.

Finally, the results also contribute to the theory: the understanding of categorization processes operated by bureaucracy should observe the association between different types of categories and how their combinations build different classification and merit systems, even in cases of similar behavior. If differentiated treatment in contexts of high inequality is important to generate equity, it can also be reversed in increasing inequality (Pires, 2019; Lotta & Pires, 2019), treating the most vulnerable as a case to be excluded from the school walls.

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ANNEX

Annex 1: Interviewee profiles

BOX A1 INTERVIEWEE PROFILES (AGE)

Age	Number of teachers
25-34 years	8
35-44 years	8
45-54 years	11
Over 55	12

Source: Elaborated by the authors.

BOX A2 INTERVIEWEE PROFILES (EXPERIENCE)

Years of experience	Number of teachers
1-3	15
4-9	13
10-15	7
Over 15	7

Source: Elaborated by the authors.

Annex 2: interview script

Personal issues:

1. Your name and age?
2. When and why did you decide to be a teacher?
3. What's your background?
4. Do you live near here?
5. Did you go to public school?
6. Do you attend any community association, church, club, etc?
7. Do you perform any activity in the school district?

Aspects of the institution and its activities:

1. How long have you been working here?
2. What kind of contract?
3. What do you like about your work? (feelings, relationships with colleagues, relationship with bosses and directors, relationship with users of their work, etc.).
4. Does the manager support you so you can do your job in the best possible way? Yes/no, why?
5. Who do you contact when you have questions about how best to proceed at work?
6. Could you describe me a typical day's work?
7. Do you think you have the autonomy to choose the tasks you perform on a daily basis?
8. And to establish rules and procedures?
9. And to decide how to deal with exceptional cases (e.g., any problems in the classroom, any problems with a student or family)? Do you handle a lot of cases like this? Could you give me an example?
10. Regarding the rules for your work, do you feel that there are many rules? Can you strap some? And do you understand that there are laws or internal regulations that are unfair or wrong?
11. If I asked you to name three characteristics to be a teacher at this school, what would they be?
12. How is your relationship with the other teachers?
14. How is your relationship with the students' parents?
15. How is your relationship with students?

Relationship with students:

1. Can you describe a typical student?
2. Do you think they look alike or different from you?
3. Which students are the easiest to work in the classroom? Why? And which are the hardest? Why?
4. Thinking about your story as a teacher, can you remember any remarkable situation that challenged you? Tell me when it was, what happened, and why you acted that way. And today, would you do the same thing, or do you act differently?
5. Could you describe to me a success story you've experienced in high school? And one of failure?
6. In your perception, what are the biggest difficulties students face today?

Answer in one sentence:

1. Being a teacher is...
2. A good student is...
3. Education serves to...

Annex 3: vignettes

VIGNETTES: HIGH SCHOOL TEACHERS

Control vignette

Imagine a high school boy. His name is Gustavo, and he is 14 years old. His family moved to Sao Paulo in April when he joined the new school. His mother is 40 years old and works as a nurse at a health clinic nearby. His father is 42 years old and works as a teacher at a nearby high school, too. Gustavo has an older brother.

Gustavo has adapted well to the class. He is a funny boy and has attracted peer attention by telling jokes and talking about pornography, which he learns from his older brother at home. He is also messy during class and disrupts progress. Last month you had a meeting with him and his parents, in which the parents' said Gustavo was always like this; that he is influenced a lot by his older brother, and it is hard to get him to obey instructions.

Gustavo has not been doing well at school either. He is getting bad grades, does not do his homework, and does not perform the activities that his teachers require in class. The parents said they have given up fighting with him, which is no use since he will study only if he wants to.

Vignette 1

Imagine a student in high school. His name is Lucas, and he is 14 years old. His mother is 40 years old and a maid. The father is 42 years old and is a bricklayer. Lucas has two more brothers, and the family is very close.

Lucas is a popular boy at school and usually has a dominant role in both the classroom and breaktimes. During breaks, his fellow students often surround him: girls flirt with him and boys admire him. During class, he takes a critical and arrogant stance. He thinks he knows more than his peers and often refuses to participate in the activities proposed by teachers because he finds them too easy or boring.

Recently, Lucas' behavior has changed. He has been late for classes, is very irritable, and has started socializing with young people outside of school. He has systematically cabled the class and is outside school smoking with these friends. You asked for a meeting with him and his parents. They told you that Lucas' behavior has changed a lot, but they don't know what to do. They think it is part of that age to have different friends and live new experiences. They also think that, sometime, he will go back to school if he wants to or look for work if he does not really like to study. Lucas' grades have been steadily dropping, and you realize that if he continues this way, he will hardly be able to finish high school.

Vignette 2

Imagine a student in high school. His name is Daivisson, and he is 14 years old. His mother is 30 years old and a day laborer in some family homes. She has no fixed salary per workday and raises her son by herself. Daivisson has 3 younger brothers.

He is a popular boy at school and usually has a dominant role in both the classroom and breaktimes. During breaks, his fellow students often surround him. He has had several girlfriends at school. During classes, he often refuses to participate in the activities proposed by teachers because he finds them too easy or boring.

Recently, Daivisson's behavior has changed. He has been late for classes, is very irritable, and has started socializing with young people out of school. He has systematically cabled the class and is outside school smoking with these friends. You asked for a meeting with him and his mother. She told you she has had a hard time with Daivisson, who no longer stays at home and no longer helps with his younger siblings. He spends the day on the street and does not want to study or work. She does not know what to do since she works away from home every day and cannot stay close to or control her son. Daivisson's grades have been steadily dropping, and you realize that if he continues this way, he will hardly be able to finish high school.

ELEMENTARY SCHOOL

Control vignette

Imagine an elementary school student. His name is Lucas, and he is 8 years old. His family moved to Sao Paulo in April when he joined his class. His mother is 32 and works as a nurse at a UBS nearby. His father is 35 years old and works as a teacher at a nearby high school, too. Lucas has a younger brother.

Lucas has adapted well to the class. He is a funny boy and has attracted his peers' attention by telling jokes, sometimes inappropriate for his age, that he learned from watching Total Dolly with his father at home. Nevertheless, it has been very difficult to teach him in class. He is messy and disrupts class progress. After many complaints from the teachers, the coordination indicated that he should go to a psychologist, who diagnosed Lucas with a difficulty in focus and attention in the classroom.

Last month, you had a meeting with his parents, who told you that Lucas is having a hard time at home, too. The mother also said that he has stopped obeying instructions and does not want to do school tasks. He has been very aggressive with his parents, but the mother is afraid to punish him; she feels guilty because she works so hard and cannot pay much attention to her child and thinks that punishing her son will push him further away.

Lucas has not been doing well in school, either. His math learning is behind the rest of the class, and he has not yet grasped the basic concepts of addition and subtraction. The parents said they decided to stop helping Lucas with his homework as he gets very nervous, and they have also avoided pressuring their child on account of all the changes they have been experiencing.

Vignette 1

Imagine an elementary school student. His name is Robson, and he is 8 years old. His mother is 30 years old and is a maid. His father is 32 and is a bricklayer. Robson has an older brother and a younger sister.

Robson is a popular boy at school, and usually has a dominant role in both the classroom and breaktimes. During the break, Robson decides the games and acts as a mediator when there are conflicts in the room or fights between other boys. During class, he sometimes finds the activities boring and

loudly criticizes the proposals you make, refusing to participate in activities he finds dull. Other times, when he finds the activities interesting, he is cooperative and acts in a very participative manner.

You recently had a meeting with his parents, who told you that, during the last semester, they have had difficulty with Robson's homework. Although not having much, he refuses to do the very least and ends up fighting with his parents. They also reported that Robson complains about the school and the tasks being boring and silly. Homework moments have been very tense. The family is very close, and they try to help their son, but after a lot of fighting they end up letting Robson watch television or play soccer instead of doing the lessons. They do not think there is any way to make Robson like school.

Looking at Robson's grades, you notice that his level of learning has dropped in the last semester and that he is at a very late level of reading learning compared to the class.

Vignette 2

Imagine an elementary school student. His name is Jonathan, and he is 8 years old. His mother is 25 years old and is a cleaning lady in some family homes. She has no fixed salary per workday and raises her son by herself. Jonathan has 3 younger brothers.

Jonathan is a popular boy at school and usually has a dominant role in both the classroom and breaktimes. During breaks, Jonathan decides the games and acts as a mediator when there are conflicts in the room or fights between other boys. During class, he sometimes finds the activities boring and loudly criticizes the proposals you make, refusing to participate in activities he finds dull. Other times, when he finds the activities interesting, he is cooperative and acts in a very participative manner.

You recently had a meeting with his mother, who told you that, during the last semester, they have had difficulty with Jonathan's homework. Although not having much, he refuses to do the very least and ends up fighting with his mother. She also said that Jonathan complains about the school and the tasks being boring and silly. Homework moments have been very tense, and she cannot help much because she comes home late and needs to take care of the house and the other children. She also finds it difficult to support Jonathan as she has not completed her studies. When Jonathan complains a lot, she ends up letting him watch television instead of doing the lessons. Jonathan's mother believes he already has many difficulties in life because he has no father and that the school must meet his needs.

Looking at Jonathan's grades, you noticed that his level of learning dropped in the last semester and that he is at a very late level of reading learning compared to the class.

Annex: Codes 4

BOX B1 CATEGORIES

Types of categories	Category	Explanation	Original categories used by teachers
Behavioral categories	Obedient	When the teacher refers to disciplined and obedient students who respect the teacher and are calm.	Disciplined student, obedient student, student who has discipline, quiet student, good boy, good student.
	Aggressive	When the teacher refers to aggressive and violent students who disrespect the teacher.	Violent student, aggressive student, disrespectful student.
	Needy	When the teacher mentions students who have emotional neediness.	Needy student, student who needs affection, student who needs hugs.
	Learning difficulty	When a teacher mentions students who have a learning disability.	Student with low performance, learning difficulty, unable to learn, late in education, with low intellectual ability.
	Lack of focus	When a teacher mentions students who have difficulty focusing and paying attention.	Lack of focus, inattentive, disinterested, lazy, not open to learning.
	Problem child	When a teacher calls students complicated or problematic.	Complicated, problematic, undisciplined, dominant, problematic.
	Smart	When a teacher mentions intelligent students.	Smart, wise, outstanding student.
	Arrogant	When a teacher mentions students with an arrogant attitude or arrogance in the classroom.	Arrogant, student who thinks he is more important than others.
	Inquisitive	When a teacher mentions a questioning and critical student (positively or negatively).	Inquisitive student, critical student.
Pathological category	Drug users	When a teacher mentions that some students have problems with drug abuse.	Drug-user student, student using drugs.
	Learning pathology	When a teacher mentions students with pathological learning problems.	Attention deficit student, hyperactive student.

Continue

Types of categories	Category	Explanation	Original categories used by teachers
Family categories	Unstructured family	When a teacher mentions broken families.	Broken family, family without structure, unstructured family.
	Family provides no support	When a teacher mentions families that do not support the school and student.	Family that does not support the school, family that does not help teachers, family that does not participate in school, absent family.
	Family sets no boundaries	When a teacher mentions families that do not discipline students.	Family that has no pulse, family that lets student do what they want, family that doesn't educate, family that doesn't give limits, family that doesn't give boundaries.
	Family of drug users	When a teacher mentions families who abuse or have abused drugs.	Drugged family, drug user parents, crack family (can be just mother or father instead of family).
	Structured family	When a teacher mentions a family considered to have a good structure.	Structured family, family like the one from an advertisement, perfect family.
Social class category	Social class	When a teacher mentions a student's social class.	Rich student, poor student, lower-class student, middle-class student, student with money, student with no money, vulnerable student.

Source: Elaborated by the authors.

BOX B2 ACTIONS

Activate colleagues	When a teacher proposes activating colleagues to discuss the case or make an intervention in it as a solution.
Activate principal	When a teacher proposes activating principal or the pedagogical coordination as a solution.
Adapt	When a teacher thinks about a solution adapting some strategy to that specific case.
Activate parents	When a teacher proposes activating student's parents as a solution.
Bonding	When a teacher proposes bonding or creating ties with the student (complicity, relationship, connection) as a solution.
Talking to student	When a teacher proposes talking to the student both inside or outside the classroom as a solution.
Relinquishing	When a teacher proposes that this is a case with no solution.
Set boundaries	When a teacher proposes setting boundaries, making threats, or disciplining a student as a solution.
Motivate	When a teacher proposes developing strategies of motivation to make the student interested as a solution.
Blame family	When a teacher blames the family for the situation.
Psychologist	When a teacher suggests that the student should be treated by a psychologist.
School reinforcement	When a teacher suggests that student should do school reinforcement.
Other services	When a teacher refers the case to other services outside of the school (children's center, social work, center for drug users, external diagnosis, job market center).

Source: Elaborated by the authors.

Annex 5: comparison of vignettes between Elementary and High School levels

The original analyzes aggregated the responses of all teachers by vignette. In this annex we disaggregate the analyzes by level (Elementary and High School), with two objectives: to identify the general patterns that persist regardless of the cut by level and to bring out the specifics of the levels.

Categories in the center of the network

Tables 1 to 3 show the categories included in the core of the 2-mode networks of vignettes 1 to 3, implemented in the Ucinet environment (Borgatti et al., 2002; Borgatti & Everett, 1997). The boxes convey the categories that are repeated at different levels and in the network that aggregates both levels.

BOX C1 CATEGORIES AT THE 'CORE' – CONTROL VIGNETTE

	EF	EM	All Levels
Categories at the 'Core'(behavior)	<ul style="list-style-type: none"> • Lack of focus • Problem child • Learning pathology • Family provides no support 	<ul style="list-style-type: none"> • Family provides no support 	<ul style="list-style-type: none"> • Problem child • Family provides no support • Family sets no boundaries
Categories at the 'Core'(action)	<ul style="list-style-type: none"> • Activate parents • Bonding • Motivate • Blame family • School reinforcement 	<ul style="list-style-type: none"> • Bonding • Talking to student • Motivate 	<ul style="list-style-type: none"> • Activate parents • Talking to student • Motivate • Bonding

Source: Elaborated by the authors.

BOX C2 CATEGORIES AT THE 'CORE' – VIGNETTE 1

	EF	EM	All Levels
Categories at the 'Core'(behavior)	<ul style="list-style-type: none"> • Lack of focus • Smart • Family provides no support • Structured family 	<ul style="list-style-type: none"> • Problem child • Arrogant • Drug users • Family provides no support • Family sets no boundaries 	<ul style="list-style-type: none"> • Problem child • Family provides no support • Family sets no boundaries • Lack of focus
Categories at the 'Core'(action)	<ul style="list-style-type: none"> • Activate parents • Talking to student • Motivate • Blame family 	<ul style="list-style-type: none"> • Activate principal • Activate parents • Bonding • Talking to student • Motivate 	<ul style="list-style-type: none"> • Activate parents • Talking to student • Motivate

Source: Elaborated by the authors.

BOX C3 CATEGORIES AT THE 'CORE' – VIGNETTE 2

	EF	EM	All Levels
Categories at the 'Core'(behavior)	<ul style="list-style-type: none"> • Lack of focus • Social class 	<ul style="list-style-type: none"> • Drug users • Unstructured Family • Social class 	<ul style="list-style-type: none"> • Problem child • Family provides n support • Family sets no boundaries • Lack of focus • Obedient • Drug users • Unstructured family • Family of drug users • Social class

Continue

	EF	EM	All Levels
Categories at the 'Core'(action)	<ul style="list-style-type: none"> • Activate parents • Talking to student • Motivate 	<ul style="list-style-type: none"> • Talking to student • Other services • Psychologist 	<ul style="list-style-type: none"> • Activate parents • Talking to student • Motivate • Activate principal • Psychologist • Other services

Source: Elaborated by the authors.

Closeness centrality analysis

We created 1-mode networks by vignette and level (Elementary and High School) applying sum of the products to project from 2-mode to 1-mode, standardizing by the number of responses received by category. From these 1-mode networks, we calculated the closeness centrality, based on Freeman’s proposal (Freeman, 1979). As the closeness metric is sensitive to the size of the network and the average size of the paths, the direct comparison of the closeness of the distinct network categories can be difficult to interpret. For that reason, we present the closeness metrics for each network, along with the ranking of categories by network. We included categories that were in the top five on at least one network.

BOX C4 CLOSNESS METRICS BREAKDOWN BY VIGNETTE AND LEVEL (FUNDAMENTAL AND HIGH SCHOOL)

Category	Closeness by vignette/level							
	EF – Control Vignette	EM - Control Vignette	EF - Vignette 1	EM - Vignette 1	EF - Vignette 2	EM - Vignette 2	EF - All Vignettes	EM - All Vignettes
<i>Obedient</i>	0.20	0.33	0.33	0.25	0.41	0.33	0.51	0.33
<i>Lack of focus</i>	0.37	0.48	0.42	0.40	0.41	0.33	0.60	0.53
<i>Drug users</i>	0.20	0.33	0.33	0.44	0.25	0.47	0.25	0.60
<i>Learning pathology</i>	0.38	0.47	0.33	0.38	0.35	0.33	0.54	0.50
<i>Unstructured family</i>	0.32	0.33	0.33	0.25	0.35	0.46	0.47	0.55
<i>Family provides no support</i>	0.37	0.61	0.41	0.45	0.34	0.43	0.54	0.74

Continue

Closeness by vignette/level								
Category	EF – Control Vignette	EM - Control Vignette	EF - Vignette 1	EM - Vignette 1	EF - Vignette 2	EM - Vignette 2	EF - All Vignettes	EM - All Vignettes
<i>Family sets no boundaries</i>	0.36	0.54	0.41	0.45	0.38	0.41	0.55	0.68
<i>Family of drug users</i>	0.28	0.33	0.33	0.25	0.40	0.33	0.51	0.33
<i>Structured family</i>	0.20	0.33	0.43	0.25	0.25	0.33	0.48	0.33
<i>Social class</i>	0.34	0.47	0.33	0.42	0.39	0.45	0.53	0.58
<i>Activate parents</i>	0.38	0.56	0.43	0.47	0.39	0.42	0.57	0.72
<i>Bonding</i>	0.38	0.56	0.33	0.42	0.35	0.33	0.56	0.65
<i>Talking to student</i>	0.20	0.58	0.43	0.49	0.39	0.47	0.54	0.70
<i>Motivate</i>	0.38	0.55	0.42	0.44	0.39	0.42	0.62	0.65
<i>Other services</i>	0.20	0.47	0.33	0.42	0.35	0.45	0.42	0.58
<i>Blame family</i>	0.36	0.33	0.42	0.25	0.25	0.33	0.54	0.33
<i>Psychologist</i>	0.35	0.47	0.33	0.42	0.25	0.45	0.47	0.58
<i>School reinforcement</i>	0.38	0.33	0.33	0.25	0.35	0.33	0.57	0.33

Ranking of categories by closeness								
Category	EF – Control Vignette	EM - Control Vignette	EF - Vignette 1	EM - Vignette 1	EF - Vignette 2	EM - Vignette 2	EF - All Vignettes	EM - All Vignettes
<i>Obedient</i>	20	21	12	21	1	15	13	25
<i>Lack of focus</i>	6	13	4	15	1	15	2	19
<i>Drug users</i>	20	21	12	6	18	2	25	9
<i>Learning pathology</i>	2	17	12	18	14	15	7	23
<i>Unstructured family</i>	17	21	12	21	10	3	17	16
<i>Family provides no support</i>	6	1	9	3	16	8	7	1
<i>Family sets no boundaries</i>	10	6	9	3	8	12	6	4
<i>Family of drug users</i>	19	21	12	21	3	15	13	25

Continue

Ranking of categories by closeness								
Category	EF – Control Vignette	EM - Control Vignette	EF - Vignette 1	EM - Vignette 1	EF - Vignette 2	EM - Vignette 2	EF - All Vignettes	EM - All Vignettes
<i>Structured family</i>	20	21	1	21	18	15	16	25
<i>Social class</i>	12	17	12	11	4	4	11	10
<i>Activate parents</i>	2	3	1	2	7	10	3	2
<i>Bonding</i>	2	3	12	10	10	15	5	5
<i>Talking to student</i>	20	2	1	1	4	1	7	3
<i>Motivate</i>	1	5	5	5	4	10	1	5
<i>Other services</i>	20	16	12	11	10	4	23	10
<i>Blame family</i>	9	21	5	21	18	15	7	25
<i>Psychologist</i>	11	17	12	11	18	4	18	10
<i>School reinforcement</i>	2	21	12	21	10	15	3	25

Source: Elaborated by the authors.