

INEQUALITIES IN SOCIAL LIFE ENVIRONMENTS OF BASIC EDUCATION IN THE METROPOLITAN REGION OF NATAL/BRAZIL¹

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Abstract [Arial, 12-point, bold, centred]

The present study uses comparative analysis to explore the concept of habitus within basic education at public schools in municipalities of the metropolitan region of Natal, (MRN) Rio Grande do Norte, Brazil, considering the implications for regional development. The theoretical framework applies Pierre Bourdieu's idea of habitus to address the environment where the educational social life of students unfolds as a viable setting to generate dispositions to study. Thus, using data from the 2000 and 2005 School Censuses and the Grade of Membership (GOM) statistics program, we developed three typologies that characterize inequalities: Adverse Environment, Deficient Environment and Favorable for Generating Dispositions. These refer to the quality of the school settings analyzed in enabling them to better address problems related to existing inequality, allowing a broader view, in accordance with their needs and deficiencies.

Keywords: education, habitus, typologies of school environments.

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1 INTRODUCTION

The metropolitan region of Natal, Rio Grande do Norte state, Brazil exhibits problems and challenges typical of all the country's large urban centers, though with particular dimensions and characteristics. Basic education is one of these issues.

The essence/spirit of this investigation aligns with current concern in the academic community and government agencies responsible regarding a common theme, that is; education understood as one of the essential forces for development within the participatory framework of those individuals directly involved – research professors, parents and public officials. In this context, analytical effort centers on basic education and seeks to contribute by improving quality in this area, leading to greater academic performance. As such, a set of indicators associated with educational social life were grouped into the following dimensions: context, institution, teaching and learning, and education. The **objective** is to develop **typologies of educational social life** within schools in the metropolitan area of Natal, Rio Grande do Norte (Brazil) through a set of variables related to infrastructure and human resources in 2000 and 2005.

The metropolitan region of Natal (MRN), located west of the Atlantic Ocean, was established by State Law number 152 on January 16, 1997, with a current surface area of 2.5 thousand km². It corresponds to 5.2% of the total area of Rio Grande do Norte state and the 2010 Demographic census calculated that 42.5% of the State population resides in the region, consisting of ten municipalities: Natal, Parnamirim, São Gonçalo do Amarante, Ceará-Mirim, Macaíba and Extremoz, Nísia Floresta, São José do Mipibu, Monte Alegre and Vera Cruz². Growth rate for the area between 1991 and 2000 was 2.66% [1].

TABLE 1 – Population distribution for municipalities in the metropolitan region of Natal,
1991, 2000, 2010 and growth rate from 1991-2000

Municipalities	Year			Growth Rate
	1991	2000	2010	1991- 2000
				R

² Since the municipality of Vera Cruz was recently included in the metropolitan area of Natal, it was excluded from analyses in the present study.

Ceará-Mirim	52,157	62,424	68,141	2.04
Extremoz	14,941	19,572	24,569	3.07
Macaíba	43,450	54,883	69,467	2.65
Natal	606,887	712,317	803,739	1.81
Nísia Floresta	13,934	19,040	23,784	3.56
Parnamirim	63,312	124,690	202,459	7.90
Monte Alegre	15,871	18,878	20,685	6.68
São G. Amarante	45,461	69,435	87,668	4.86
São J. do Mipibú	28,151	34,912	39,776	2.44
RM de Natal	884,164	1,116,151	1,340,288	2.66

Source: BRASIL-NAPP. Research Report: Analysis of the Intra-Metropolitan Structure of Natal, 2006

The majority of government services are located in Natal, in addition to industrial activities – particularly in the textile and clothing industries – and commerce, as well as a significant tourist sector centered on coastal beaches, which exhibited a marked increase in the 1990s [2].

The MRN, legally established in 1997, was founded in a context of political negotiations and not necessarily for bringing together relentless urban problems (including violence) or exhibiting classic metropolitan characteristics, such as a high degree of conurbation or urban functional trends among its municipalities. This is not to say it does not display these problems or characteristics, only that they are not sufficiently evident to warrant classification as an actual metropolitan region, such as those in the states of Rio de Janeiro and São Paulo. This is also the case when we compare Natal to regional cities in the cities of Recife, Fortaleza and Salvador, due to its population size of slightly more than one million inhabitants or its functional and economic importance in the Northeast. Thus, it can be considered a developing city that exhibits inequalities.

In this context, examining the theme of elementary education to identify the causes of social vulnerability among the youth of Natal, using a new and updated database, is an essential and fundamental part of a process in progress. This allows for continuous empirical, systematic and cumulative research that is spatially disaggregated.

Brazilian public education at the elementary level has in recent years showed troubling educational indicators, not only with respect to institutions responsible for its care, but also for those directly involved. These include high failure and dropout rates and the Basic Education Development Index (IDEB). Results of the latter, published by the Ministry of Education (MEC), indicate that in 2009 only 0.09% of municipalities (5 out of 5948) achieved the target grade of 6 for the IDEB in the final years of elementary schooling in public schools. The situation is slightly better for the initial years of schooling: 405 of 5467 municipalities assessed – 7.4% of the total – have reached the target.

A grade of 6 was established as standard by the MEC in accordance with indices obtained by countries within the OCDE (Organization for Economic Cooperation and Development). This total is required to be attained for starting years in 2021 and the final years in 2024. In the 2009 IDEB, Brazil achieved grades of 4.6 for the former and 4.0 in the latter (see TABLE 2).

TABLE 2: IDEB – Brazil, RN and municipalities of the MRN, 2009

Brazil/RN/Municipalities in the MRN	First years	Final years
Brazil	4.6	4.0
RN	3.9	3.3
Ceará-Mirim	2.9	2.7
Extremoz	3.0	3.0
Macaíba	2.8	2.6
Monte Alegre	2.9	2.4
Natal	3.7	3.0
Nísia Floresta	3.4	2.7
Parnamirim	4.0	3.2
São Gonçalo do Amarante	3.2	2.7
São José de Mipibu	3.0	2.5
Vera Cruz	3.4	2.8

Source: BRAZIL - INEP/MEC, 2009.

Rio Grande do Norte state is no exception to this reality, with data demonstrating an average IDEB for public schools of 3.5 in the first years of elementary education and 2.9 for the final years. Municipalities from the MRN in this state also exhibited indicators along these lines, given that problems and challenges typical to all large urban centers in the country are also evident here, though in specific dimensions and characteristics. Basic education is certainly one such issue. The state capital Natal recorded a mean IDEB of 3.7 for initial years and 3.0 for the final years of elementary study, while the remaining municipalities in the MRN vary from 2.8 to 4.0 and 2.6 to 3.0 for the first and last years, respectively [3] (see TABLE 2).

Selective changes – sectoral and spatial in nature – have contributed to aggravating pre-existing social inequalities and causing common metropolitan problems, primarily those related to the environment (use and preservation of water resources), infrastructure (sewage sanitation, refuse collection, cemeteries, abattoirs) and social issues, where elementary education is one of the most serious problems.

The context in which education displays its dynamic is marked by intra-urban social inequality in the metropolitan region of Natal (MRN). This reveals the existence of sharp contrasts between central and peripheral areas with regard to socioeconomic conditions (income, jobs, education, housing) and access to sanitation services (water, sewage and refuse), as well as a trend towards segmentation of social structure. Thus, as in other Brazilian cities, the MRN is a focal point for social issues. This is evident in ongoing social segmentation processes where social groups and classes are separated into abundant and efficiently integrated areas and regions where large populations live multiple stages of social exclusion. This is more clearly illustrated in Map 1, which shows the hierarchical segmentation of the MRN socio-occupational configuration: 1) Upper; 2) Upper-middle; 3) Middle; 4) Lower-middle; 5) Working; 6) Lower; 7) Farm laborers; and 8) Farmers [4].

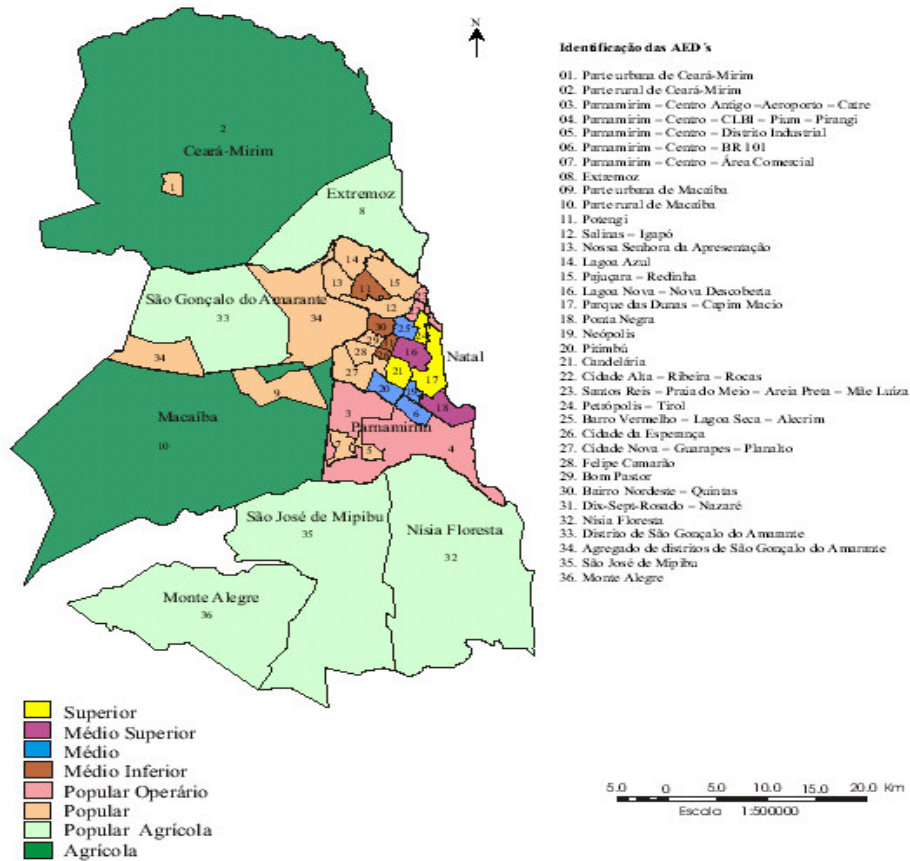
Map shows the spatial distribution of the socio-occupational hierarchy for each of the municipalities in the metropolitan region of Natal, indicating that: 1) Natal encompasses six categories in this hierarchy (Upper, Upper-middle, Middle, Lower-middle, Working and Lower), making it more heterogeneous in relation to the other municipalities. Moreover, it is the only one that exhibits the more privileged groups in this hierarchy.

MAP 1

Socio-spatial typologies – RMN - 2000



Tipologias socioespaciais – RMNATAL - 2000.



Fonte: UFRN - Núcleo RMNatal, 2005. Baseado nos microdados do Censo, IBGE, 2000.

Upper
Upper-middle
Middle
Lower-middle
Working class
Lower
Farm laborers
Farmers

Escala: Scale

Source: UFRN – MRNatal, 2005. Based on Census micro data, IBGE, 2000.

ii) The municipality of Parnamirim exhibits a relatively heterogeneous socio-occupational classification, consisting of three categories: Middle, Working and Lower classes. The last two indicate this municipality displays predominantly disadvantaged social hierarchy conditions in an urban context. iii) Ceará-Mirim and Macaíba have a homogeneous socio-occupational structure composed of two categories (Lower class and Farmers), the former is urban in nature and the latter rural, placing them in a less privileged social hierarchy. iv) Similarly, the São Gonçalo do Amarante municipality shows a two-category socio-occupational configuration (Farm laborers and Lower class), also indicating disadvantaged social hierarchy. Three municipalities, namely Extremoz, Monte Alegre and São José de Mipibú, have a homogeneous socio-occupational structure consisting of only one category (Farm laborers), corresponding to underprivileged social hierarchy in a rural context.

It is within this framework that we consider education in municipal schools from the Natal metropolitan region.

2 THEORETICAL REFLECTION

We began with the idea that education is immersed within the field of relationships, and that school, along with their many environments: classrooms, laboratories, library, sports court, etc., are not exclusively where these relationships are fortified, but also represent the scenario where students' educational social lives develop. The characteristics of these settings shape school environments, which function as conditioning factors for the construction of a habitus to study.

What is habitus? It is a set of historical relations “deposited” into individuals in the form of schemata for the mind and body related to perception, appreciation and action, that is:

A system of lasting and transposable dispositions considered as organized structures predisposed to function as structuring frameworks; that is (disposition systems) as the generating and organizing principle of practices and representations that can be objectively adapted to their purpose...[5].

However, on the one hand it consists of dispositions acquired through experience (according to the place and moment), which allow individual behavior to be guided with respect to certain purposes without being consciously driven towards or by them. On the other hand, the abilities that produce dispositions are in fact acquired, socially

constituted dispositions that re-introduce action by agents, their capacity for invention and improvisation. From this angle, habitus produces strategies that, although not the product of conscious aspiration towards a goal specifically inculcated based on adequate knowledge of objective conditions or a mechanical determination of causes, are objectively adjusted to the situation [6].

In this sense, habitus consists of the action that social structures exert on individual behavior and would follow an outward trajectory. In other words, initial movement would occur in the social and family environment, corresponding to a specific position in the social structure. Individuals would incorporate a set of dispositions for typical action associated with this position (a family or class habitus), which would then guide them over time in various environments of action [7].

Here, Bourdieu's relational analysis is crucial, given that school represents the educational social life of students and is also where they are instilled with the habitus for study, with participation by teachers and parents. Therefore, habitus is the guiding concept in this investigation and the presence or not of classrooms, libraries, laboratory, sports court, etc. in the various school settings served to determine the typologies of educational environments. These environments are discussed in the next section.

2.1 Educational social life environment

The educational social life environment referred to here is the school itself, where students and teachers fulfill their relationships essentially around a common factor: the pursuit of knowledge. These are the social players that give meaning to the school setting, which provides several environments for knowledge to circulate through a relational act between these players so that the final result of this phenomenon is "learning and acquiring knowledge". Inequalities are known to exist in this environment and identifying these inequalities is the goal of the present study. This is achieved through the identification of specific features characterizing schools, thereby determining the type of environment where the educational social life of students develops within schools from MRN municipalities.

Based on the above reflections, inequalities in the educational social life setting (the school) consist of a structured circuit with four dimensions: i) context environment, ii) institutional environment, iii) learning and teaching environment and, iv) educational environment. The interconnection between these dimensions establishes school

environment conditions, which become mediating instruments in constructing habitus and at the same time, function as mechanisms for generating dispositions of study and positively impact student academic performance.

The reflections developed up to this point have greater interpretive power when these dimensions are associated and interconnected with their respective variables, detailed below.

The rural-urban context dimension functions as spaces differentiated by their own particular characteristics in the sense that these contexts are not two spatial spheres of a continuum (tradition-modernity), but rather are two structures in permanent interaction. There is a certain division of work between them, since the first consists mainly of primary agricultural activities while the second centers predominantly on secondary and tertiary activities. Urban economy cannot be self-sufficient; it depends on rural economy which in turn, relies on the city, particularly regarding a certain degree of specialization in activities developed there.

The teaching and learning environment consists of three essential components: i) teacher qualification; ii) the students and iii) the classroom. This last educational setting is where encounters take place between teachers and students. These are directed by the former in a teaching and learning process involving a reflective plan of practices that are focused on enriching values, ideas and attitudes in a process implying transformation through learning and knowledge.

The educational environment functions in connection with the previous dimension and is characterized as the area where educational social life develops (library, laboratory, video library, TV room, sports court). It allows for constant mental exercise through research and laboratory experiments, as well as physical exercise designed to care for physical health. These practices in conjunction (mind and body) foster and develop a variety of situations where individuals may interact outside school within society, which require different skills and abilities of an educational, intellectual, cultural and technological nature. As such, the educational environment becomes much more than merely a pedagogic tool.

The institutional environment: from a macro perspective, schools are social institutions centered on training and educating new generations in the field of knowledge, values and attitudes and the socialization of historically constructed

knowledge, as well as developing new knowledge for future generations. These singularities of the school setting are materialized in three types of administrative facilities in elementary and high schools, that is: i) federal, ii) state and iii) municipal. Environments in which infrastructure and quality of teaching staff can produce a differential impact on basic education.

These dimensions pave the way for a better approximation of the phenomenon, since they have greater qualitative analytical concreteness. This allows a more accurate understanding of the development of habitus capable of generating dispositions among students towards a growing interest in study.

3 MATERIAL AND METHODS

The aforementioned theoretical reflections on education are the fundamental pillars on which analysis of basic education acquires interpretative sustenance. In addition to its theoretical concept, this analytical trajectory demands an instrument design that enables the concepts cited to be operationalized and meets the objectives of our study. As such, the operational strategy applied is to establish a database on the educational social life environment of schools within the public network of MRN municipalities. To that end, we used information from databases of 2000 [8] and 2005 [9] School Censuses, carried out in Brazil by the National Institute of Public Education (INEP) in conjunction with the Ministry of Education and Culture.

3.1 Establishing the database

School Censuses provide information regarding school institutions and cycles of educational social life within basic education, on its different levels (early childhood education, elementary schooling and high school education) and modalities (standard schooling, special education and the education of young people and adults). The present investigation used only information related to elementary and high school education of public schools in municipalities of the MRN. This produced a total of 535 schools in the year 2000 and 624 in 2004, distributed throughout the municipalities of Ceara Mirim, Parnamirim, Extremoz, **Macaiba**, Monte Alegre, Natal, Nísia Floresta, São G. do Amarante and São Jose de Mipibu. Based on data from the 2000 and 2005 School Censuses, two databases were compiled for schools in municipalities of the metropolitan region of Natal in order to model the educational environment.

3.1.1 *Selecting variables to model educational environments*

Variables chosen to operationalize educational social life environments of elementary education are presented in Chart 1, generated according to the School Census.

Chart 1 – List of variables

Dimensions	Variables	Dimensions	Variables
i) Context environment	1 Location of the school (1 Urban; 2 Rural)	ii) Educational environment	1 Library 2 Video library 3 Kitchen 4 Sports court 5 Computer laboratory 6 Science laboratory 7 TV-Video room 8 Cafeteria 9 Local network 10 Internet 11 Video cassette recorder (VCR) 12 Television 13 Satellite dish 14 Printer 15 N ^o of computers
iii) Teaching and learning environment	1 Teacher's room 2 Number of teachers 3 Number of classrooms 4 Elementary school classes 5 High school classes 6 Elementary school applications 7 High school applications 8 Teachers with a degree in elementary education 9 Teachers with a degree in high school education		
iv) Institutional environment	1 Administrative Dependence 2 Offers pre-school 3 Offers elementary schooling 4 Offers high school		

3.2 **Characteristics of the statistical model: *Grade of Membership* – GoM**

Selection of variables and establishing databases (200 and 2005) to model educational environments form the basis for operationalization of the types of school social life environments. These are presented in two movements: construction of extreme

environments and ii) calculating scores for schools from each environment generated. To that end, we used the Grade of Membership (GoM) method, whose characteristics are described below:

According to [10], [11], applying the GoM requires data for J discrete response variables, with a finite number (L_j) of response categories for the j^{th} variable. For intrinsically discrete variables coding is direct. In this case, data can be considered as consisting of J multinomial variables (X_{ij}) with L_j levels of response for the j^{th} variable or, equivalently, define Y_{ijl} as individual response i to category l of variable j , which is a binary variable, that is, assuming a value of 1 if it belongs to the l^{th} category or 0 if it does not. With respect to continuous variables, these must be recoded at intervals in order to generate categorical variables.

For each elements of a fuzzy set, in the case of school institutions, there is a so-called relevance score, or GoM score, denoted by g_{ik} . This depicts the degree of relevance of the i^{th} element, to the k^{th} set or profile. These scores range (0.1) from 0 (zero) indicating the school does not belong to the k profile, to 1 (one) meaning it exhibits all the characteristics of the k^{th} profile.

Determining the GoM scores for each study unit allows for a heterogeneous representation between them, within each profile generated. Modeling this heterogeneity consists of identifying the various characteristics of the multivariate density function that describes score distribution for the population of interest. Based on the universe of study, it is possible to establish a certain number of extreme (pure) profiles and a set of GoM scores for each unit of each profile. The set formed by the profiles (environments) and respective scores is called fuzzy participation.

The probability of response l , for the j^{th} variable, by the school with the k^{th} extreme profile is denoted by λ_{kjl} , which obeys specific restrictions detailed in [11].

Thus, based on the assumptions, the probability model to construct the procedure for maximum likelihood estimation is formulated, with iterative estimation of its parameters according to maximization of the expression³

$$L(Y) = \prod_{i=1}^I \prod_{j=1}^J \prod_{l=1}^L \left(\sum_{k=1}^K g_{ik} \lambda_{kjl} \right)^{Y_{ijl}}$$

³ Greater detail on the GoM can be found in [10].

3.2.1 Operationalization of Environments⁴: Extreme profiles

Characteristics of each setting are outlined in accordance with examination of λ_{kjl} values – provided by the GoM method – and subsequently compared with the corresponding marginal frequency. We chose to define three extreme environments, producing satisfactory results that met the principles of parsimony and ease of interpretation. The deciding rule to characterize profiles was when the estimate of λ_{kjl} was sufficiently higher than the marginal frequency. Thus, a value of 1.2 was established for the ratio between λ_{kjl} and corresponding marginal frequencies. In other words, the values outlining predominant characteristics in each profile correspond to a situation where estimated λ_{kjl} probabilities exceed their marginal frequency in the population by more than 20% [10], [11].

As previously mentioned, the methodology applied to construct this typology allows schools to be partial members of several extreme profiles, making further investigation of these profiles necessary. Boolean expressions were therefore developed to enable the creation of mixed profiles and determine predominant ones, which describe the combination of degrees of relevance for schools [11].

4 RESULTS OF THE MODEL OUTLINING TYPES OF EDUCATIONAL ENVIRONMENTS

Developing typologies of quality for school environments and applying these to subsequently classify these establishments enables a better approach to problems associated with existing heterogeneity. This provides a view of the institutions in accordance with their particular needs and deficiencies. As such, the analytical approach deals with the model of typologies (profiles) for educational social life environments.

4.1 Adverse environment for generating dispositions

These are schools located in rural areas; offering pre-school education; part of a municipal network; without a teacher's room, library, sports court, TV-video room, VCR, or satellite dish; number of teachers ranging between 1 and 5; number of classrooms varying from 1 to 5, with fewer than 10 elementary education classes; fewer

⁴ In the traditional GoM literature these are denominated as profiles, which for operational reasons we refer to as environments since it is in these settings that relationships related to educational social life are fulfilled.

than 151 elementary schooling applications and no teachers with a degree in basic education.

4.2 Deficient environment for generating dispositions

These schools are situated in urban areas; offer elementary schooling; with no pre-school education, library or sports court; with a television and satellite dish; between 6 and 16 teachers 16; number of classrooms ranging from 6 to 10; between 10 and 19 classes; number of applications varying between 151 and 500 and; 0.1% to 50% of teachers with a basic education degree.

4.3 Favorable environment for generating dispositions

These schools are in urban regions; belong to federal and state education networks; do not provide elementary schooling; offer high school; have a teacher's room, library, video library, sports court, computer and science laboratories, TV-video room and cafeteria; have a local network, internet, VCR, internet and satellite dish; printer and computers; more than 17 teachers; between 11 and 20 and more than 21 classrooms; with more than 20 high school classes and over 500 elementary school applications; high school classes varying from 3 to 26 and higher and number of applications between 50 and 1000; 50.1 to 100% of teachers with a high school degree and those with higher education ranging from 45% to 100%.

4.4 Analysis

Reflections presented here facilitate an analytical approach toward profiles of educational social life environments in basic education at municipal schools within the MRN. This is based on the notion of habitus, assuming that the characteristics of certain environments related to school social life would function among students as generators of disposition to study.

In this context, three extreme profiles characterize educational social life environments within public schools of the MRN: i) Extreme typology 1 denotes schools considered Adverse Environments for Generating Dispositions; ii) Extreme typology refers to institutions as Deficient Environments for Generating Dispositions and iii) Extreme typology 3 identifies schools as favorable Environments for Generating Dispositions.

Results displayed in TABLE 2 show that in the year 2000, 38% of schools in the MRN exhibited some characteristics of **“Adverse Environments for Generating Dispositions”**. In other words, they were located in rural areas, belong to the municipal network and have no pedagogic equipment or teachers holding degrees. Five years later (2005), this percentage decreased, indicating some of these schools progressed to better teaching conditions. Despite this improvement, the percentage of schools in this category is still high, suggesting an environment that may prevent students from achieving greater academic performance as a result of adverse conditions.

With respect to MRN schools displaying characteristics of **“Deficient Environments for Generating Dispositions”**, that is, state institutions in urban areas at elementary level, which are poorly equipped and where a significant portion of teachers do not have degrees, 34% of schools fell within this category in 2000, rising to 39% in 2005. This slight increase is the result of improvements in establishments considered **“Adverse Environments for Generating Dispositions”** in 2000 to better conditions in 2005, though still exhibiting deficiencies (TABLE 2).

Table 2 - % Distribution of extreme and mixed profiles for schools in the Metropolitan Region of Natal, according to type of educational social life, 2000 - 2005

Educational social life environments		FREQUENCY	
		2000	2005
Adverse Environ. for generating dispositions	AEGD1	27.66	23.88
Intermediate Adverse Environ. for generating dispositions	AEGD1 2	0.37	1.28
Slightly Adverse Environ. for generating dispositions	AEGD1 3	10.09	3.53
Sub total		38.13	28.69
Deficient Environ. for generating dispositions	DEGD2	18.13	30.45
Intermediate Deficient Environ. for generating dispositions	DEGD2 1	5.45	0.64
Slightly Deficient Environ. for generating Dispositions	DEGD2 3	10.47	8.01
Sub total		34.02	39.10
Favorable Environ. for generating dispositions	FEGD3	16.64	20.99
Intermediate Favorable Environ. for generating dispositions	FEGD31	1.68	0.64
Slightly Favorable Environ. for generating Dispositions	FEGD32	6.54	10.42
Sub total		24.86	32.05
Not defined		2.99	0.16
TOTAL		100	100.00
N		535	624

Source: Based on data from the 2000 and 2005 School Censuses, INEP.

On the other hand, only 25 % of elementary schools in MRN municipalities offered students a “**Favorable Environment for Generating Dispositions**” to study in the year 2000. Findings also demonstrate that the proportion of schools displaying this type of educational environment for this year was smaller in relation to the other two settings,

increasing slightly to 32% in 2005. This profile corresponds to state and federal schools located in urban areas, offering elementary and high school education, with good pedagogic facilities and where a large number of teachers have degrees (TABLE 2).

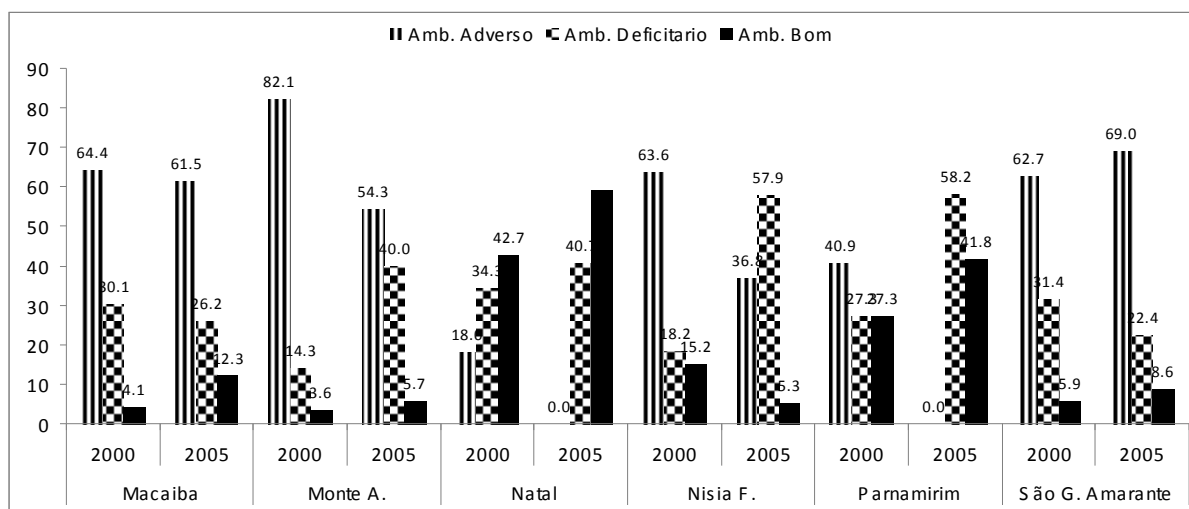
4.5 Profile of school environments according to municipalities

A disaggregated analysis enables a more accurate assessment of the types of school environments in each of the MRN municipalities. This information is displayed in Graph 1, characterizing the profile of the environment where students' educational social life develops, consisting of **three extreme** and six mixed profiles, described in the previous section.

With regard to elementary schools, graph 1 indicates that in 2000, four of the nine MRN municipalities (Monte Alegre (82%), Macaíba (64%), Nísia Floresta (64%), São Gonçalo do Amarante (63%) predominantly contained institutions considered **“Adverse Environments for Generating Dispositions”**. In 2005, significant changes are only recorded for the municipalities of Monte Alegre and Nísia Floresta, where percentages declined to 54% and 37%, respectively. The remaining municipalities in this category experienced only slight reductions for this type of school (GRAPH 1).

This result is significant since it portrays a school environment presumed to be having a negative impact on academic performance among students. Nevertheless, this situation would in turn, act as one of the limiting factors for generating dispositions to study in that it is “lasting and subsequently transposable in generating knowledge”.

GRAPH 1 – Schools from selected municipalities in the MRN, according to type of educational social life environment, 2000 - 2005



Adverse Environ. Deficient Environ. Favorable Environ.

Source: Based on data from the 2000 and 2005 School Censuses, INEP.

Schools denominated “**Deficient Environments for Generating Dispositions**” were predominant in Natal and Parnamirim, accounting for 34% and 27% of schools in 2000, respectively. Five years later, these percentages rose to 41% and 58%, respectively, possibly because conditions improved in many of these institutions. It is important to note that in Natal, slightly more than 40% of public schools were considered deficient educational environments. This is significant in that this municipality is wealthier in comparison to others in the MRN.

As per Graph 1, the third type of extreme environment, namely “**Favorable Environments for Generating Dispositions**”, is the least common in comparison to other types of school settings, indicating that such environments are not prevalent in any of the municipalities. Nevertheless, Macaíba stands out in that schools from this area experienced a qualitative improvement from 4% to 12%, between 2000 and 2005. Natal and Parnamirim also improved, with 59% and 42% of schools exhibiting this type of educational environment in 2005, respectively. These proportions are significantly higher in relation to schools in the remaining RN municipalities. The same graph also reveals that this typology was only recorded in 10% of schools from three

municipalities in 2005: Monte Alegre (6%), Nísia Floresta (5%) and São Gonçalo do Amarante (9%).

These findings reveal that only a small portion of basic education schools within the public network of MRN municipalities represent favorable environments, where it is easier to inculcate and generate dispositions among students that lead to a habitus of study.

Results identify and characterize conditions of inequality in which the educational social life of students from most public schools in MRN municipalities develops (adverse and deficient). This may compromise the student learning process and presumably causes deficiencies in their academic performance, placing them at a disadvantage when facing new cycles of school social life with students from favorable educational environments. As such, these environments are not only instruments for academic training, but also make up part of the range of components related to planning and development. At macro level this is accomplished in the context of each municipality in the MRN, and at a micro level in student performance results, which depict and outline their future potential in academic life cycles.

5 CONCLUSIONS

- Although the metropolitan region of Natal experienced a decline in the number of schools exhibiting adverse environments between 2000 and 2005, percentages are still high. In this type of school it is difficult to inculcate habitus to study, which prepares elementary school students not only for greater academic performance, but also to continue through new cycles of educational social life. It is therefore essential to break the cycle that is producing and reproducing students with little or no will to advance into new cycles of educational social life.

- It is important to emphasize the need for enhancing dynamic and intuitive partnerships between federal universities and teachers from basic education schools, as well as parents, in order to preserve and improve the educational social life of our children and seek positive effects in the habitus of study.

- It is important that these preliminary results of educational environments be associated with academic performance so as to add new factors explaining this phenomenon and identify suggestions for educational policy makers.

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