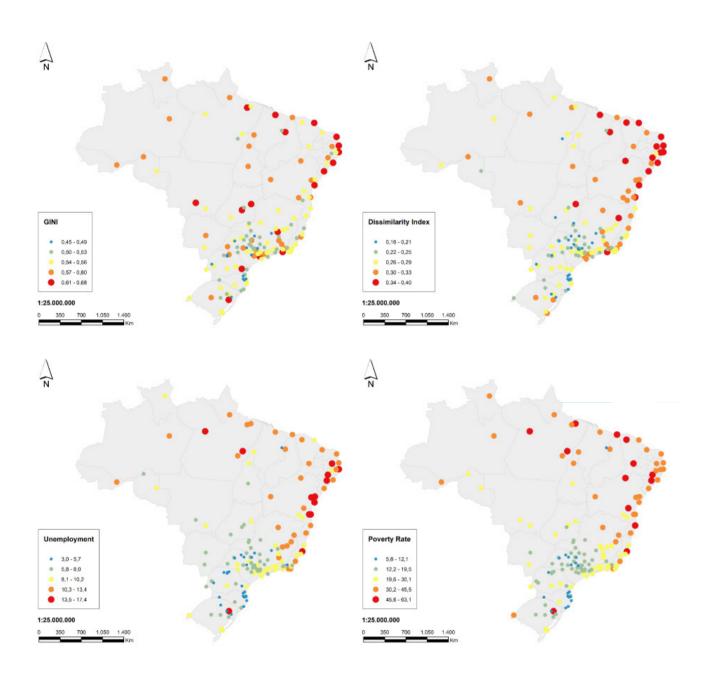
Inequality and Segregation in Brazil: Insights from the SALURBAL Project

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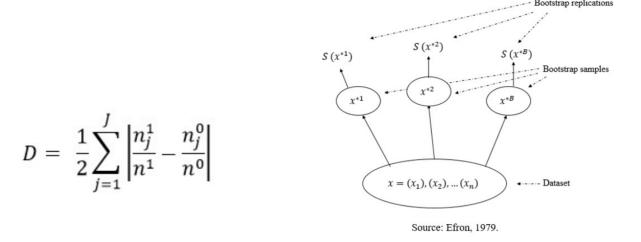
INTRODUCTION

Urban segregation has brought great challenges to more impoverished societies worldwide, especially in concentrated poverty contexts undermining health. This study aimed to assess income segregation in the 152 largest Brazilian cities included in the SALURBAL Project and identify specific socioeconomic characteristics related to spatial segregation by income.



DATA AND METHODS

Using the IBGE demographic census database of the year 2010, we calculated the income dissimilarity index (IDI) at census tract level for each SALURBAL city. After that, we verified the association of the IDI with Gini index, poverty rate, social environment index, GDP per capita, unemployment rate and the population using linear regression models.



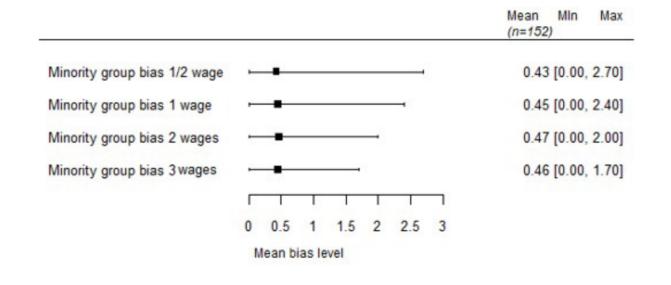
J is the number of areas (census tracts) that make up each city. $n_j^{r_1}$ is the total households of areas j. n^1 is the total of households, i.e. the sum of all $n_j^{r_1}$. $n_j^{r_0}$ is the proportion of area j's poor households and n^0 is the proportion of the city area's households that is poor.

RESULTS

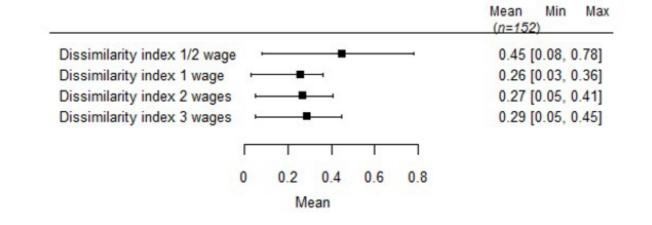
Low-income minority group cut-off (%)

						Mean Min Max (n=152)
Minority group 1/2 wage	•	4				1.70 [0.80, 11.30]
Minority group 1 wage	-	•	-			13.10 [2.30, 35.80]
Minority group 2 wages			•			33.80 [11.20, 65.20]
Minority group 3 wages		-		_	-	50.20 [20.90, 77.10]
		-	1			
	0	20	40	60	80	
	Mean minority goups					

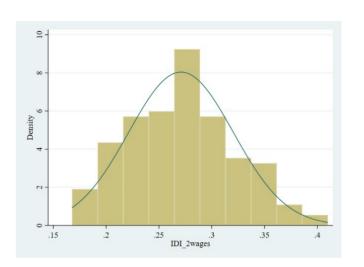
Level of bias embedded in the dissimilarity index by cut-off (%)

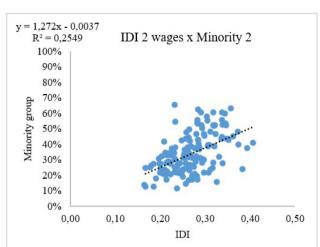


Mean of the IDI



Statistical Distribution





Using linear regression models, the results indicate that the Gini index and poverty are the main variables associated with residential segregation, measured by the IDI. Characteristics of the social environment were also associated with IDI, reinforcing that access to education, to water, sanitation and better residential conditions are fundamental to improve social equity.

CONCLUSIONS

It is necessary to discuss the creation of policies that mitigate urban and regional inequalities in Brazil. In this sense, equitable income distribution programs are beneficial in reducing inequality, segregation, poverty and improving the population's welfare conditions.

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