

Does the environment influence crime? Analysis of the relationship between environmental indicators and homicides in Brazil

Human behavior can be influenced by several factors, such as income, education, psychological and family aspects, local culture, the environment in which one lives, among other elements. Understanding how these factors interact helps to explain certain social manifestations, such as violence and criminality (CÂMARA DOS DEPUTADOS, 2018)

It was up to the criminal theory of the ecological model to explain the influence that the environment can exert on the individual, contributing to the practice of crimes. This model considers cities as a living social organism, where the relationships between individuals and the environment in which they are inserted are dynamic and subject to constant changes (DETONI, 2019).

The ecological model had its genesis in the studies of criminal behavior in Chicago, in the United States, which at the beginning of the twentieth century presented increasing rates of murders and robberies. It was found that the economic growth of the city attracted people from different places and cultural traits. Without a master plan to organize the city, people began to live in small houses, with precarious conditions of garbage collection, urbanization and sanitary treatment. It is also associated with the fact that the immigrants did not have any ties with the place where they began to reside. The results of this social disorganization were the rise of crime rates. Researchers began to study the phenomenon and found that the environment would also influence criminal behavior. Thus, dirty, disorganized environments, with low lighting, with precarious conditions for garbage collection and sewage treatment, associated with the absence of social control would also influence crime (AGRA, 2012; PARK, 1915, 1928; ROBERT E. PARK, ERNEST W. BURGESS, 1925; SNODGRASS, 1976).

Because it associates crime with environmental factors and because it originated in Chicago, USA, this theory is called the "Ecological Model" or "Chicago School" and has Ernest Watson Burgess (1886-1966), Robert Ezra Park (1864-1944); Clifford R. Shaw (1895-1957) and Henry D. McKay (1899-1980) as the leading theorists (AGRA, 2012; SNODGRASS, 1976).

It was found that the fragility and distance of social ties, the anonymity of large cities, the non-use and deterioration of public spaces such as streets, squares and parks, the noise and visual pollution of large urban centers, and the lack of planning of cities end up influencing crime (AGRA, 2012; PARK, 1915, 1928; ROBERT E. PARK, ERNEST W. BURGESS, 1925; SNODGRASS, 1976).

In this way, rescuing the bonds of identity between individuals and the space where they live and work, as well as promoting social control and fraternity among individuals, in addition to restoring public spaces, can constitute effective measures for crime control. These negotiations contribute to the family, the school, the church and the neighborhood to exercise a certain social control over the individual, contributing to the behavior being aligned with the law, avoiding the practice of crimes (CERQUEIRA, 2014; DURKHEIM, 2004).

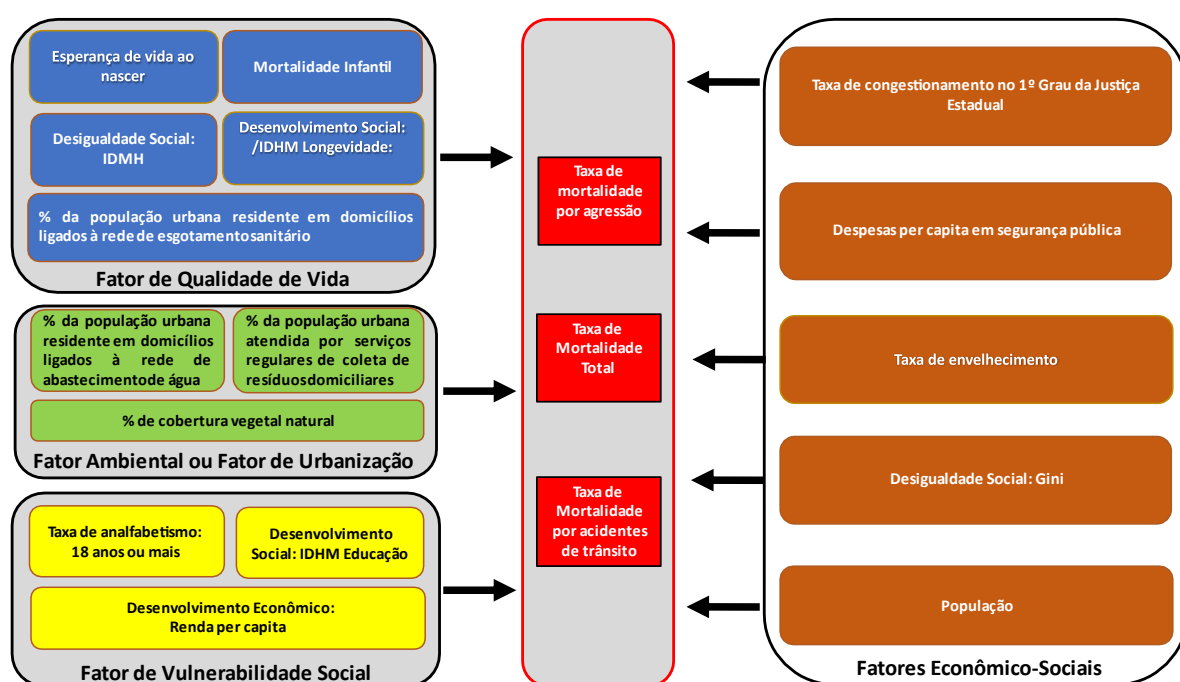
To carry out the research, the following indicators were selected as environmental factors of analysis: percentage of the urban population living in households connected to the water supply network, percentage of natural vegetation cover, percentage of the urban population living in households connected to the sanitary sewage network and percentage of the urban population

served by regular household waste collection services. Thus, based on the theory of the ecological model, it is concluded that environmental factors influence criminal behavior, being an important element to be analyzed in the studies of criminal phenomena.

This abstract submitted to the **International Criminology Conference 2024** is the result of research carried out in the Postdoctoral Program of Fumec University, in Belo Horizonte, Minas Gerais, Brazil, by Professors Dr Cid Gonçalves Filho and Dr Stanley Araújo Pena.

The research analyzed the relationship of 16 indicators with homicides, homicides caused by aggression and homicides caused by traffic accidents. The 16 indicators were divided into four clusters of analysis: quality of life factor, environmental or urbanization factor, social vulnerability factor and economic-social factors, as shown in Figure below.

Figure 01: Analysis of Indicators with homicides in Brazil



Source: The authors, 2022.

After statistical data treatment, it was found that the environmental or urbanization factor influenced mortality in the three aspects analyzed (homicides, homicides caused by traffic accidents, and homicides caused by injury). Thus, it was noted that the polluted environment and social disorganization contributed to human behavior also becoming degraded, favoring crime and violence.

Thus, the research broadens the theme of the academic debate around crime, as it analyzes violence from environmental or urbanization indicators, in addition to other factors. Therefore, promoting public policies of social organization and adopting measures to control urbanization can contribute to the moderation of crime. If you are interested, we can submit the article for evaluation and participation in the **International Criminology Conference 2024** and discuss the topic in more depth. Best regards; The authors: Dr Stanley Araújo Pena and Dr Cid Gonçalves Filho.

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