

ABSTRACT

This study delves into the intricate dynamics of murder rates spanning the years 2015 to 2021, focusing on discerning trends, spatial patterns, and their correlation with socioeconomic factors. Utilizing a dataset encompassing these years, our analysis employs statistical methodologies to unearth meaningful insights.

We first scrutinize temporal trends, identifying fluctuations and patterns in murder rates over the specified period. By comparing these findings with historical data from the preceding decade, we offer a comprehensive understanding of the evolving landscape of lethal crimes.

Spatial analysis plays a pivotal role in our study, as we investigate geographical variations in murder rates. Through advanced mapping techniques, we delineate hotspots and coldspots, shedding light on the spatial distribution of violent incidents.

Furthermore, our research extends beyond mere descriptive analysis to uncover underlying correlations between murder rates and socioeconomic factors. By integrating data on poverty, education levels, and other pertinent metrics, we scrutinize the interplay between social conditions and crime prevalence. Through regression analysis and correlation studies, we aim to identify significant associations, providing valuable insights for policymakers and stakeholders.