



Mapping crime – Hate crimes and hate groups in the USA: A spatial analysis

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Summary

This study explores the geographic association between incidents of hate crimes and the presence of hate groups in the United States. Using data on hate groups and hate crimes from the Southern Poverty Law Center (SPLC), Jendryke and McClure address the degree to which hate groups and hate crimes are co-located, suggesting that the strongest association is at the local level. The findings of this study suggest that there is a non-negligible association between the geolocation of hate groups and incidents of hate crimes.

Methods

The data on hate groups and hate crimes used for this study was derived from publicly available point level data collected by the SPLC. The SPLC data on hate crimes includes 4118 incidents that were recorded between 2000 and 2017. The SPLC data also includes 778 hate groups that fall into 13 distinct hate group categories. Initially, the researchers used Discrete Global Grid System (DGGS) to aggregate the data from both SPLC sources. Then, the researchers established a relationship between hate groups and hate crimes with a co-location analysis. The raw count data was then modeled using Geographically Weighted Regression (GWR). A Spatial Lag Model (SLM) was used to reveal the spatial dependence between hate groups and hate crimes.

Results

The results of the co-location analysis found that of all 3266 cells that were examined 11.5% (374) experienced only hate crimes, 4.4% (144) show only hate groups, and 6.9% (225) have a direct co-location of both phenomena within a single cell. These findings suggest a significant spatial dependence between both phenomena. The Geographically Weighted Regression (GWR) found that a significant association of about 52%–62% of the deviance explained, indicating that over 40% was unexplained. Using a Spatial Lag Model (SLM), the researchers found that the association between hate crimes and hate groups decreases as the radial distance increases at all DGGS resolutions. This study found that at localized areas, an average of 39.5% of the hate crimes can be correlated with hate groups.

Implications

This study indicates a possible spatial correlation between the presence of hate groups and hate crimes. However, the authors note the geospatial limitations of available data on hate crime. Given this, an accurate spatial analysis on the relationship of hate groups and hate crimes requires complete reports on hate crime incidents in the United States.