Spatial Distribution of Children with an ASD Enrolled in Indiana Public Schools Compared to Quality-of-Life Indicators.

Jeffrey L. Ashby

1Department of Geography, IUPUI School of Liberal Arts

Autism Spectrum Disorder (ASD) is currently the fastest-growing developmental disability in the United States with the current prevalence rate of 1 in 88 as reported by the Centers for Disease Control and Prevention (CDC) Autism and Developmental Disabilities Monitoring (ADDM) Network. This increase has particularly impacted schools, since according to the Individuals with Disabilities Education Improvement Act [IDEA], these students must be served in the least restrictive environments that may range from special to inclusive classrooms. As such, it is important to assess the situation across the state of Indiana to better understand the areas of need and the distribution of this special population.

This poster will take a spatially descriptive and quantitative approach to where and how ASDs are distributed across the state of Indiana using tools similar to those used by epidemiologist, such as crude rates and Bayesian modeling.

Data were provided by the Indiana Department of Education and included a list of all public school districts in the state and the number in each district diagnosed with an ASD. A set of ten U.S. Census variables were identified from the literature and used to create a quality-of-life indicator to compare with the results of the spatial analysis.

Based on the analysis, we can conclude that while autism in Indiana schoolchildren appears to be evenly distributed across the state, the more rural areas are at risk for services and should be made a priority for resources provided by the state and those NGO’s that specialize in helping those parents and families with children with ASDs.

Mentors: Andrew Baker, Department of Geography, IUPUI School of Liberal Arts