

# Disparities in Autism Educational Classification in the United States: A Summary of Public-School Data in Three States

Bailey Bevil, Shelby Breitmann, Bethany Dyals, Catherine Franke, Anna Hassett, Gracie Padgett, Teal Benevides, PhD, MS, OTR/L,  
Department of Occupational Therapy • Augusta University • Augusta, Georgia

## INTRODUCTION

- **Problem:** Limited research exists to describe and understand disparities in autism spectrum disorder (ASD) classification across counties in the United States. A classification of ASD is valuable as it provides the child with greater access and provision of resources both within and outside of the school system.
- Research has shown that definitions and evaluation procedures vary among states (Pennington et al, 2014).
- Some individuals who have autism spectrum disorder do not obtain a diagnosis of ASD until they are into their adolescence or adulthood (Centers of Disease Control and Prevention [CDC], 2020).
- Early intervention for autism spectrum disorder can increase positive outcomes (CDC, 2020).
- Only 58% of children who meet the criteria for a diagnosis of autism spectrum disorder have it documented in their education or health records (Mandell et al, 2009).
- **Purpose Statement:** This study sought to collect data demonstrating ASD disparities in three states, Massachusetts, Louisiana, and New York, in the United States as it relates to classification and accessibility to school-based services.

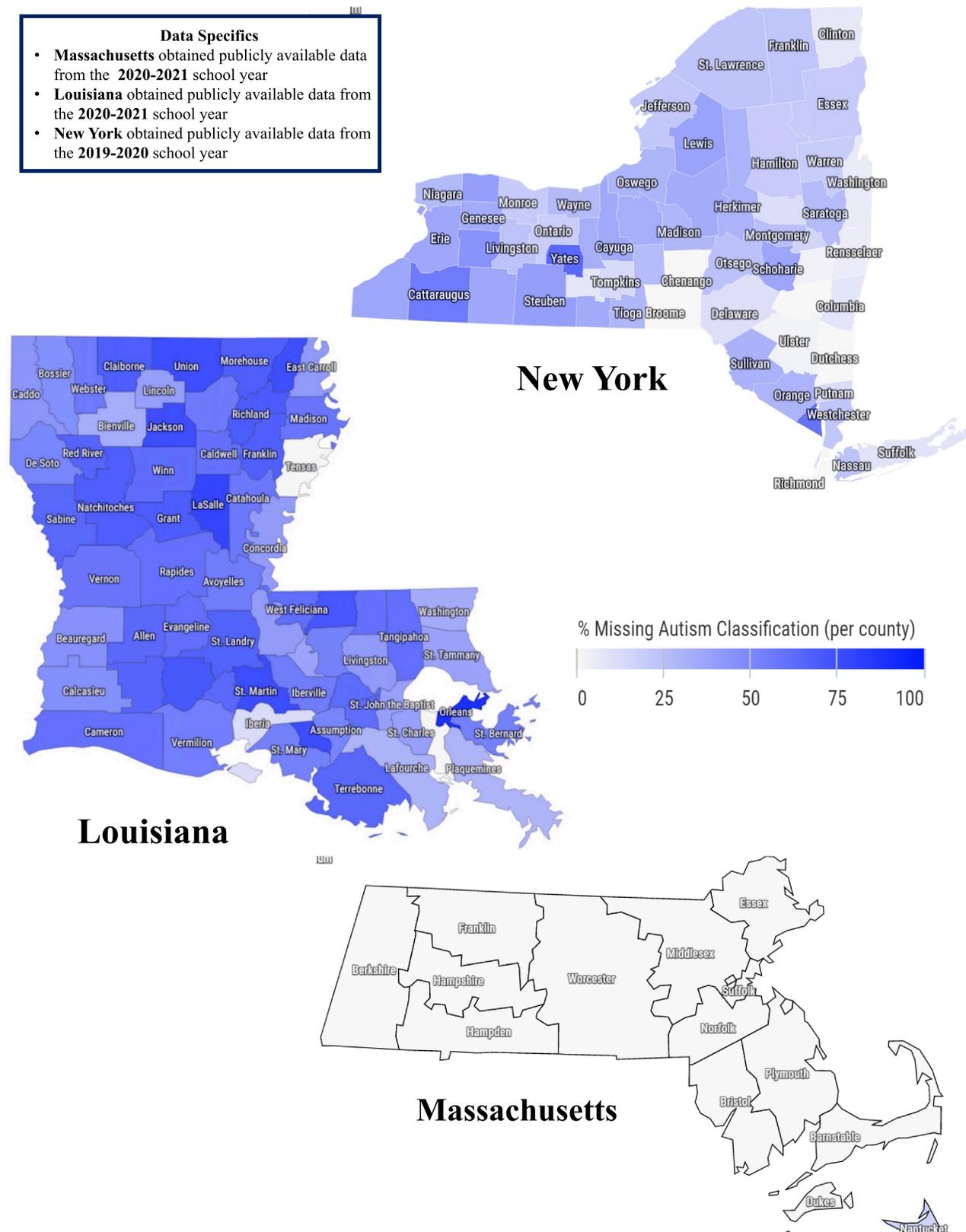
## METHODS

- **Research Design:** Observational, retrospective study
- Three states were selected based on geographical location and state-reported autism prevalence rates found on the CDC website via the National Survey of Children's Health: Louisiana, New York, and Massachusetts.
- One state was chosen from each CDC category of prevalence rates, including low, moderate, and high, representing children diagnosed with ASD in 2018 (CDC, 2021).
- The CDC calculated that 1/54 children has ASD which was used when calculating expected autism rates (CDC, 2016).
- Publicly available enrollment data for each state was obtained to calculate and assess the percent of children missing an ASD classification based on the CDC prevalence rate.
  - Percent Missing =  $\frac{\text{expected} - \text{observed}}{\text{expected}} \times 100$
- Louisiana's counties, called parishes, as well as Massachusetts's counties did not include total enrollment numbers of charter schools from the same year as the autism data, leading to the exclusion of charter schools in our analysis.
- **Data analysis** was conducted through mapping county level data using Vennage software for visual representations of disparities.

## RESULTS

**Data Specifics**

- **Massachusetts** obtained publicly available data from the **2020-2021** school year
- **Louisiana** obtained publicly available data from the **2020-2021** school year
- **New York** obtained publicly available data from the **2019-2020** school year



## CONCLUSIONS

- Public school data shows that ASD classification rates vary widely within states and their counties.
- **Massachusetts:** All but one county have identified more than the expected number of children with ASD. 1 of 14 counties under-identified students.
- **New York:** Majority of counties have under-identified the number of children with ASD. 55 of 62 counties under-identified students with autism.
- **Louisiana:** Majority of counties (parishes) have under-identified the number of children with ASD. Louisiana had the highest missed rates between the 3 states. 62 of 64 counties under-identified students with autism.
- Factors that could be leading to disparities include geographical location, funding, access to health care, and race.
- **Limitations:** Inaccessibility of public-school data, difficulty locating county level data, lack of standardization of school enrollment data across states, and exclusion of charter schools.

## CLINICAL IMPLICATIONS

- Having an ASD classification will affect accessibility to OT services, including early intervention.
- Our results support the need for universally available data for ASD identification within the public school system.
- Further research is necessary to explore factors affecting disparities including geographical variations, race, school district funding, and access to healthcare
- **OT implications:** Attend school board meetings and participate in state level advocacy, educate teachers and school staff regarding signs and symptoms of ASD, continue research to investigate factors affecting ASD classification.

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Contact: sbreitmann@augusta.edu