

Background

Autism Spectrum Disorder or autism, is a neurodevelopmental disorder impacting 1 in 36 children (Maenner et al., 2023). Autism is characterized by deficits in communication, including delayed or limited communication, limited social interaction, or absent of face-to-face contact, e.g., leading another child by hand but not looking them in the face, as well as narrowed or preoccupied interests that are specific and not shared with others, e.g., preoccupation with wheels, or a specific gadget, toy or other item(s). The Diagnostic and Statistical Manual of Mental Disorders Fifth Edition Text Revision (DSM-5-TR; American Psychiatric Association (APA), 2022) requires five criteria to be met before an autism diagnosis can be made. This criteria includes persistent deficits in communication and interactions, at least 2 or four restricted and repetitive behaviors, the symptoms must present during the early developmental period, the symptoms have a clinical impairment level in important areas of life and or functioning, and these disturbances cannot be explained or better explained by an intellectual developmental disorder (ID/D) an intellectual disability, or global developmental delay (APA, 2022).

A diagnosis of autism can be made as early 12 months (Landa, 2008) but the mean age of diagnosis falls between 51 and 53 months (Kilmer & Boykin, 2022). Historically, racially minoritized children have been identified later than Whites; however, Maenner et al. (2023) recently reported a reversal in trends, with minority children (Black, Hispanic, Asian/Pacific Islander, and children with two or more races) now being diagnosed more often than White children. The contributions of socio-economic status to delayed identification are not clear.

Purposes of the Study

The purposes of the study were to: (a) investigate disparities in autism diagnosis between 2016 and 2021 across race, gender, and SES, according to percentages of individuals identified with autism, and (b) determine if race, gender and SES contribute to delays in diagnosis, as measured by caregiver reported age that autism was first identified.

Conclusions

Future research should continue to investigate how Federal Poverty Level (FPL) leads to a later diagnosis of autism and investigate in what settings, and what types of providers make the diagnosis for autism. Research should also investigate the disparity between diagnostic rates for girls. Research should include Black females who are largely excluded from research, but more likely to have more severe symptoms of autism with a cooccurring intellectual disability.

Methods

Participants between the ages of 3 and 17 were selected from the 2016-2021 National Survey of Children's Health surveys, issued by the US Census Bureau. After a screener questionnaire confirmed a child(ren) or children in the home, a follow-up questionnaire was sent for one child was selected at random to be surveyed related to issues faced by children. Completed questionnaires returned were then verified for completion and coded. For years 2016-2021, 225,443 participants were included in the data collection.

Results

A total of 6,368 children (2.5%) were diagnosed with autism.

Gender. Consistent with prior findings, males were diagnosed at a higher rate than females, $\chi^2(N = 224,401) = 1959.56, p < .0001$, with 4.3% of males diagnosed and 1.2% of females diagnosed. Females ($M = 5.6$ yr.) were identified significantly later than males ($M = 4.9$; $F(1, 5837) = 9.45, p = .002$; Fig. 1).

Race. Contrary to prior findings, rates of identification were similar across races. Contrary to expectations, White children ($M = 5.4$ yr.) were identified later than Black ($M = 4.3$), Hispanic ($M = 4.5$) or Other race ethnicity identified children ($M = 4.6$; $F(3, 5837) = 20.63, p < .001$).

Poverty level. Children living in poverty (2.7%) were less likely to be identified with autism when compared to those not living in poverty (4.2%; $Wald = 311.97, p < .001$, with decreasing rates of diagnosis associated with greater poverty (e.g., 2.2% at four times federal poverty).

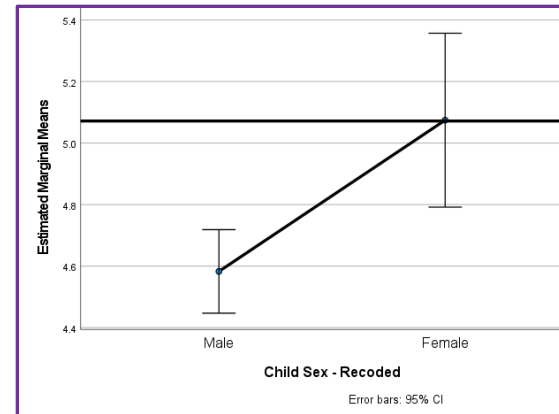


Figure 1. Average age of autism diagnosis across sex. Dark horizontal line is the grand mean.

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