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REINVENTING PUBLIC EDUCATION

Parent Voice and the Rise in Special Education Identification

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Introduction

One potential explanation for the dramatic rise in the number of public school students who are being identified for special education is the expanding opportunities and increasing urgency for parents to express their voice in the education of the their children. This may be especially true for more recent special education categories with shifting, expanding, and subjective criteria—like autism and other health impairments (which include ADD/ADHD). Such expansion coupled with the discretion of families and administrative hurdles in getting a diagnosis can open the door for parents, especially more affluent parents, to gain educational advantages for their children through mechanisms like special education identification.

As there are no widely-available direct measures of parent voice, I use three different sets of factors to stand in for parents' demand for educational resources and interventions. First, I proxy opportunities to exercise voice with the presence of charter and magnet schools in a state as well as K-12 Education Savings Accounts (ESAs). ESAs are government-funded accounts that are provided to parents who opt to enroll their children in schools outside of the public system. In this way, they are designed to give parents a large amount of flexibility—and say—in how public funds are used to educate their children. Arizona was the first to enact an ESA program in 2011, and they have rapidly grown in popularity in recent years: In 2019, just four states (Arizona, Florida, Mississippi, and North Carolina) had them; currently, 18 states do. The design of the programs also varies across states. Some states run ESA programs targeted to specific student populations (e.g., Mississippi, North Carolina, Missouri, Indiana, Arkansas, Montana, and Alabama are designed for students receiving special education services), while others (Arizona, Florida, and Utah) have universal programs.[1]

Second, because more socioeconomically advantaged parents are more likely to take an active role in their children's schools, and schools in turn are more responsive to the demands of highly-involved parents, I measure a state's median family income. Third, processes of social closure and opportunity hoarding may reflect or exacerbate the unequal distribution of educational resources, including special education instruction, and so I examine the relationship between special education identification rates and measures of racial/ethnic segregation and achievement.

[1] See Table 2 in Roy, Schwartz, and Gable (2024) for details about ESA program characteristics by state.

I find that states with more robust school choice regimes as well as states characterized by greater socioeconomic advantage and more social closure have seen higher rates and faster growth of special education identification—particularly with respect to the share of students identified with disabilities who have been diagnosed with autism.

Data Description

This data brief draws on three sources of state-level data: (1) student enrollment and disability counts from CRPE's Unlocking Potential Special Education Data Center, (2) student segregation, achievement, and population demographic data from the Stanford Education Data Archive (SEDA), and (3) information about ESA program availability from RAND. First, from the Unlocking Potential data, I create four indicators measuring the share of students identified with disabilities who have (i) autism, (ii) another health impairment (including ADHD), (iii) a learning disability, or (iv) any other disability in each state and year from 1976 to 2023. Some of the analyses below will focus on the first disability category—autism—which is characterized by particularly dramatic growth over time.

Second, the SEDA and RAND data provide the three sets of indicators of parent voice. To measure school choice availability, I use SEDA's measure of the percentage of students enrolled in charter or magnet schools, and I categorize states as either having both charters and magnets ($n = 39$) or having neither or just one of the two types of schools of choice ($n = 12$). From RAND, I categorize states by their ESA availability. For this brief, I distinguish between the four states that have had ESA programs on the books since before 2020 (Arizona in 2011, Mississippi in 2015, North Carolina in 2018, and Florida in 2019); all other states are counted as not having ESAs. This approach reflects the year in which the CPRE data observation period ends (2023) and the fact that any relationship between ESA availability and changes to special education identification will probably take some time to emerge.

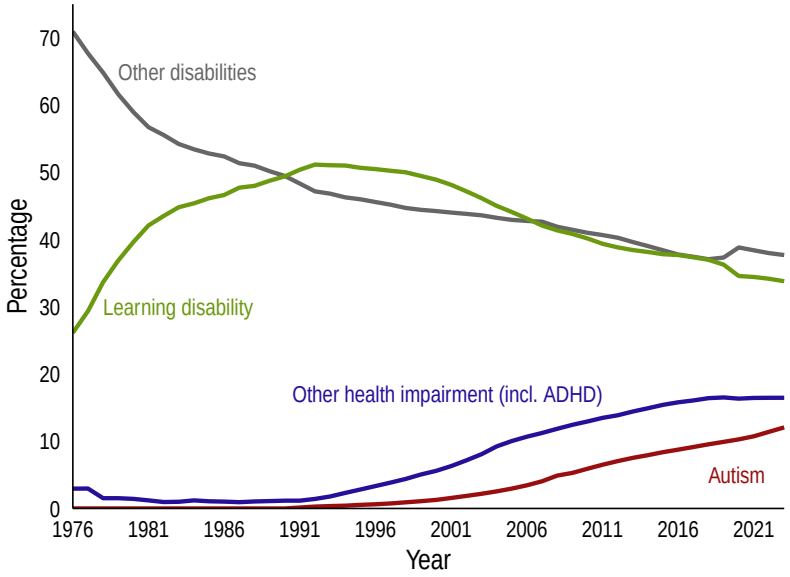
All remaining measures come from SEDA. To measure socioeconomic status, I use the log of the state's median family income. To measure social closure, I use four measures of racial/ethnic and socioeconomic segregation: normalized exposure indices between (i) Black and White students and (ii) Hispanic and White students, and racial-economic segregation between (iii) Black and White students and (ii) Hispanic and White students. The normalized exposure index is an evenness index that measures the difference between two groups' exposure to one of the groups. The Black-White normalized exposure index, for instance, compares Black and White students' exposure to Black students. The index ranges from 0 to 1; a value of 0 implies no segregation (the two groups have equal exposure to one another), while a value of 1 implies complete segregation (all schools in a state enroll students from only one group). Racial-economic segregation measures the difference between two racial groups in their school's economic (free lunch eligibility) composition. It is also measured on a 0 to 1 scale. For example, a Black-White economic segregation value of 0.5 indicates that the free lunch eligibility rate in the average Black student's school is 50 percentage points higher than in the average White student's school. Additionally, I use two achievement measures: (i) the average grade 8 math standardized test score and (ii) the difference between scores

among economically disadvantaged and non-disadvantaged students.[2]

Findings

While the share of students identified with disabilities has increased dramatically since the mid-1970s, conditions characterized by emergent, shifting, or more subjective criteria have seen disproportionate growth. As shown in Figure 1, the share of students identified with disabilities who had a learning disability increased until the early 1990s. This share plateaus when the prevalence of other health impairments (including ADHD) begins to increase, and then decreases as autism diagnoses take hold around 2000. In 2023, over 12% of students identified with a disability had autism and 16.5% had another health impairment. By contrast, the share of students identified with any other disability has been steadily declining (with the exception of a small blip in 2020 during the COVID-19 pandemic).

Figure 1: *Students with autism or other health impairments (including ADHD) make up an increasing share of students identified with a disability*

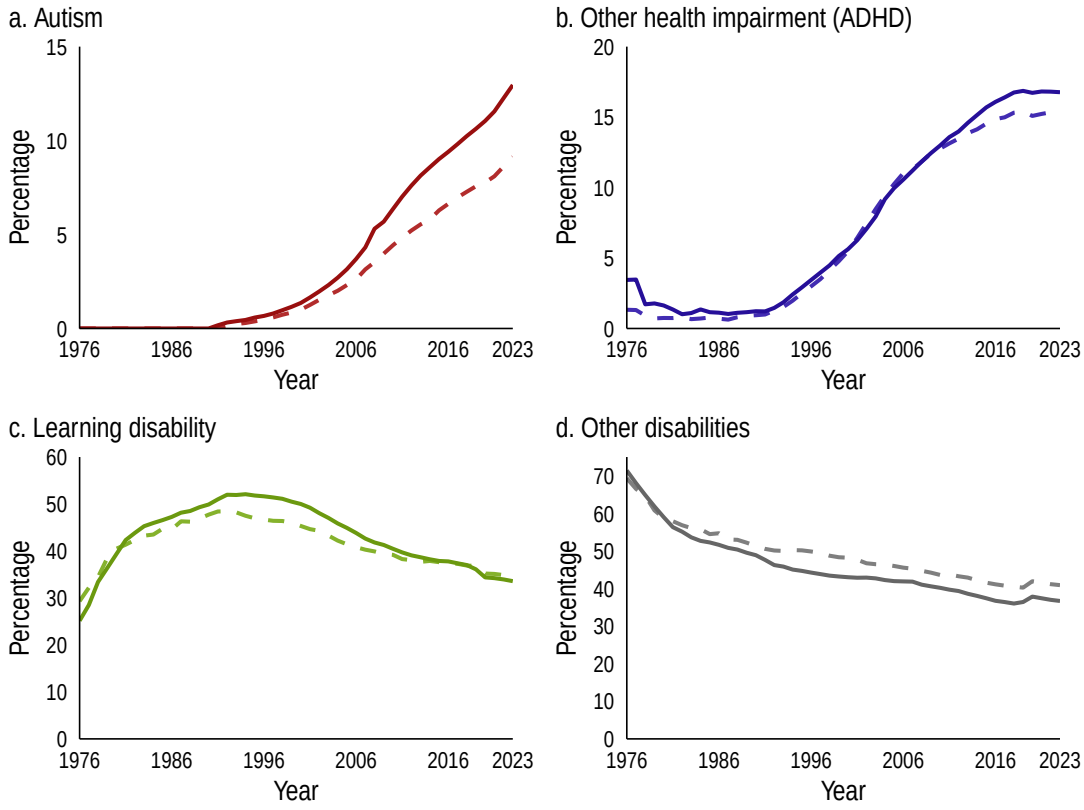


Source: Unlocking Potential Special Education Data Center (CRPE).
Notes: Figure shows the average share of students in a state with autism, another health impairment (including ADHD), a learning disability, or any other disability, as a percentage of students identified with a disability.

Since the overall trend in rising special education identification appears driven by autism and OHI diagnoses, particularly since the early 1990s, I focus next on describing the relationship between parent voice and identification rates for these particular conditions. Like Figure

[2]The SEDA data are not available for the entire 1976–2023 period covered by CRPE's Unlocking Potential data. Charter and magnet school enrollment and segregation data are available from 1991 to 2022; family income and achievement data are available from 2009 to 2019. I use all available years of data for each measure in the analyses below.

Figure 2: *Rates of autism and OHI identification are higher in states with charter and magnet schools*

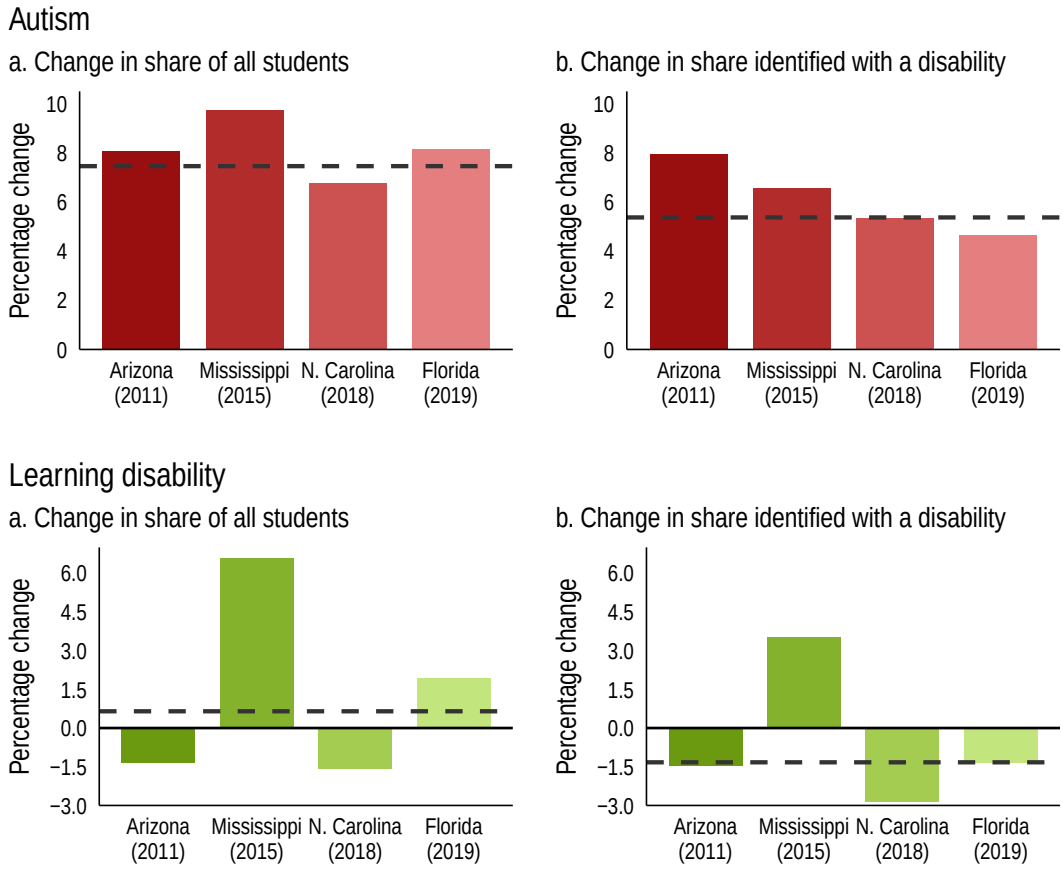


Source: Unlocking Potential Special Education Data Center (CRPE) and Stanford Education Data Archive (SEDA).
Notes: Figure shows the average share of students in a state with autism, another health impairment (including ADHD), a learning disability, or any other disability, as a percentage of students identified with a disability, by whether or not state has both charter and magnet schools (solid line = both, dashed line = either/neither). 39 states have both charter and magnet schools, 12 states have neither or either charters or magnets (results are similar if we categorize schools by whether they charters, whether they have magnets, or whether they have either charters or magnets.)

1, Figure 2 shows the prevalence of autism, other health impairments, learning disabilities, and other disabilities as the share of students identified with disabilities—this time, separating the trends by whether or not states had both charter and magnet schools. In states with both types of schools of choice, students with autism or another health impairment (including ADHD) comprised higher shares of students identified with disabilities and, particularly with respect to autism, this share increased faster over time. For example, in 2023, an average of 13% of students identified with a disability had autism in states with both charter and magnet schools, compared to just over 9% in states with neither charters nor magnets or just one of them. This is not the case, however, for either learning or other disabilities.

In addition to charter and magnet schools, Education Spending Accounts (ESAs) may be another indicator of places where parents have increased voice in education. Figure 3

Figure 3: *Rates of autism and learning disability identification saw larger changes after some states adopted ESAs*



Source: Unlocking Potential Special Education Data Center (CRPE) and RAND.
Notes: Bars in the figure show the average year-over-year percentage change in the 3 years after adopting an ESA program in the share of students with either autism or a learning disability among (a) all students and (b) students identified with a disability. The dashed line represents the average year-over-year percentage change between 2011 and 2023 among states that did not adopt an ESA program.

shows the average year-over-year percentage change in (a) the share of all students or (b) the share of students identified with a disability with either autism or a learning disability. The bars represent the average change in the 3 years since ESA adoption among the four states with longer-standing programs (Arizona, Florida, Mississippi, and North Carolina), while the dashed line represents the average change between 2011 and 2023 among states that have never adopted an ESA program.[3] Three of the four ESA states saw larger changes than the

[3]The 14 states that adopted ESA programs since 2021 are not included in these analyses since their ESA plans arguably came online too late to shape special education identification trends by the end of the observation period in 2023, but they may be otherwise difference from states that have never yet adopted an ESA program. The year 2011 was chosen as a starting point among non-ESA states because it is the year in which the first state, Arizona, adopted its ESA program; this helps constrain the comparisons to roughly the same time period. Though not shown in this figure, states that have never adopted an ESA program experienced much higher

average never-ESA state in the share of all students diagnosed with autism in the three years following adoption, while two of the ESA states saw larger changes in the share of students identified with a disability. These findings are similar to the takeaway in panel *a* of Figure 2 above. Mississippi also experienced bigger swings in the identification of students with a learning disability as compared to non-ESA states. Indeed, while most other states saw the rate at which students with a disability were diagnosed with a learning disability fall, this share increased in Mississippi.

Finally, Figure 4 shows the difference in the share of students with autism among those identified with any disability between states with relatively high and low values on each indicator of socioeconomic status and social closure. For example, the share of students identified with a disability who have autism is on average 1.7 percentage points higher in states with relatively high versus lower median income. Given that the relative share of students with autism ranges from 0 to 18.4% (among all states, between 1991 and 2023), this difference of 1.7 percentage points is not trivial. Similarly, states with more social closure—that is, where White students are less likely to attend schools with Black or Hispanic students, where White students are less exposed to students from lower-income backgrounds, and where test score gaps between economically disadvantaged and non-disadvantaged students is higher—have substantially higher relative shares of students identified with autism.

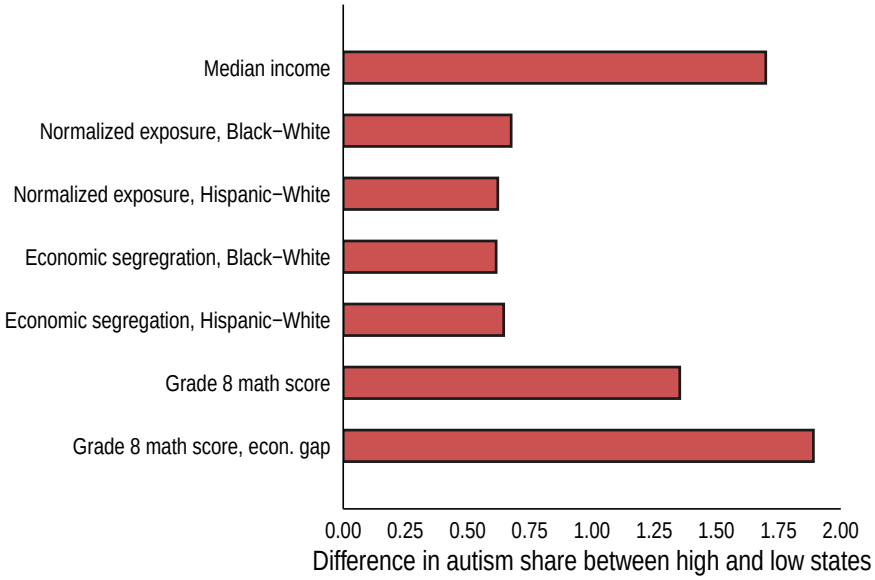
Implications

While these analyses cannot establish a causal relationship, they do support the plausible conclusion that in states where families have more opportunity or sense a greater degree of urgency to exercise their voice, rates of special education identification have increased more quickly, especially among conditions with newer, shifting, and more subjective diagnostic critera such as autism and other health impairments (including ADHD). CRPE's Unlocking Potential state-level, longitudinal data make it possible to assess how differences across state contexts might be related not only to the broad increase in special identification rates but also the variation in which conditions have seen especially fast growth, particularly when complemented by other sources of publicly-available data.

Although not quite as stronger or clear as with the presence of charter and magnet schools, ESA program adoption does appear to be related with changes over time in the share of autism identification rates among most of the four ESA states, as well as among Mississippi with respect to identification rates of learning disabilities. This less robust relationship may reflect the relative novelty of ESAs: Arizona was the first state in adopt them in 2011, and most of the 18 states that did so only in the last 5 years—including 9 states whose programs started after 2023 (the end of the special education data). Whether ESAs, particularly those targeted to students with disabilities, will incentivize parents to seek out diagnoses for their children remains for now an open empirical question and something to pay attention to in the

average year-over-year change in the share of students with other health impairments as compared to the four states that did, while the percentage changes in "other disabilities" are similar among states with and without ESAs.

Figure 4: *Rates of autism are higher in states with higher median incomes and more social closure*



Source: Unlocking Potential Special Education Data Center (CRPE) and Stanford Education Data Archive (SEDA).
Notes: Figure shows the difference in the percentage of students with autism as a share of those identified with a disability between states with relatively high and low values on the socioeconomic status (median income) and social closure (segregation and achievement). Differences are calculated by predicting values from a linear regression model that includes the specified indicator plus year fixed effects and robust standard errors (clustered by state). All indicators depicted in the figure are positively and significantly related to the share of students identified with disabilities who have autism ($p < .05$). Positive differences indicate students with autism comprise a *higher* share of students identified with a disability in states with relatively *high* values on the given indicator. Relative "high" value states are those with indicator values 1 standard deviation above the mean; relatively "low" value states are those with values 1 standard deviation below the mean.

coming years.

The findings highlight the shifting prevalence of particular diagnoses among students with disabilities, and they point to potential socioeconomic and racial/ethnic disparities in access to diagnostic and educational services. Therefore, a priority among educational agencies and public health officials should be to lower the administrative and logistic hurdles in accessing the screening and assessments necessary for identifying students' special education needs for families of all backgrounds—and not just the most vocal or most advantaged. While much attention among the press and politicians has been on trying to explain away or lower rates of autism diagnoses, this may actually be counterproductive to supporting students and their families. To the extent that autism diagnoses open the door to resources like specialized instruction and social and emotional support, policies should focus on expanding access to those resources to meet the growing demand for them.

At the same time, prior research also suggests that students with autism receive more services than students with other disabilities, such as learning disabilities. The dynamics uncovered here, particularly in Figure 1, suggest that diagnoses of autism and other health

impairments have somewhat displaced the broader "learning disability" identification, with potential implications for the distribution of services and resources. In this way, the findings highlight the importance of matching all students, regardless of the specific nature of their individual needs, with the resources, tools, and supports to thrive in school.