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The Local Declines in Child SSI Applications and Awards During COVID

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Abstract

Child applications and awards for Supplemental Security Income (SSI) fell sharply at the outset of the COVID-19 pandemic. Cumulative applications from April to September 2020 were about 30% lower than applications over the same period in 2019 with substantial variation in rates of decline across local areas. In this article, we explore the factors correlated with the change in applications and awards across localities at the beginning of the pandemic. Our findings point to three particularly important factors influencing the magnitude of the change in applications and awards: (a) the restriction of in-person services in all Social Security Administration field offices in March 2020, (b) the pandemic's disruptions to social and service networks through which people may learn about SSI, and (c) new economic stabilization policies, such as economic impact payments and supplemental unemployment insurance payments. These results highlight the substantial local variation in SSI participation. This variation is especially important in considering general issues around access to SSI, particularly for policies that aim to improve SSI access through outreach. Our findings underscore the importance of local networks in creating program awareness at local levels, and that they might be fruitful avenues for further outreach efforts.

Keywords

disability, COVID-19, Supplemental Security Income, networks

The COVID-19 pandemic brought significant health and financial disruptions to many families. Despite mostly being spared from the direct impacts of the virus (i.e., illness) children faced many stressors stemming from the pandemic that can threaten their mental health and other aspects of well-being (Fegert et al., 2020). Children experienced increased levels of anxiety, depression, and behavioral problems compared with before the pandemic (Mayne et al., 2021; Rosen et al., 2021). School closures and social lockdowns introduced particularly large disruptions to everyday routines that also affected mental health: a systematic review of 36 studies from 11 countries found that school closures were significantly associated with worse mental health outcomes among children around the globe (Viner et al., 2022). School closures also led to substantial learning loss (e.g., Jack et al., 2023). The pandemic also led to a recession, with unemployment rates in the United States soaring as high as 14.7% in April 2020, the highest level since World War II.

In this article, we assess how the pandemic affected child participation in Supplemental Security Income (SSI) benefits. Greater mental health conditions and financial instability would likely indicate that more children and families might seek SSI benefits. The pandemic also disrupted many networks that children with disabilities might rely on for supports—often occurring in the school system—which could make it harder for children and families both to learn about and subsequently apply for benefits. These factors might also vary across geographies because the disruptions stemming from the pandemic, both in terms of income and in networks, varied throughout the country.

Child SSI applications and awards declined substantially following the start of the pandemic, raising concerns about program access. The decline coincided with the substantial restriction in access to all Social Security Administration (SSA) field offices in March 2020 and with disruptions to several entities that served children, such as schools. In response, SSA substantially expanded its focus on conducting outreach to potentially eligible populations, including children with disabilities, through the establishment of Vulnerable Population Liaisons in the summer of 2021. Economic stabilization policies, like the Coronavirus Aid,

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Relief, and Economic Security (CARES) Act, might have also contributed to the decline in applications; although economic impact payments and supplemental unemployment insurance payments did not count toward SSI income and resource limits, the new sources of income might have led families to no longer find it worthwhile to incur the administrative burden associated with applying for disability benefits (Herd & Moynihan, 2018).

We explore the geographic factors associated with the decline in child SSI applications and awards during the first few months of the pandemic, exploiting variation in the extent of declines across counties. We find that the substantial restriction in field office access played an important role: larger declines happened in counties with their own field offices, where the drop in service availability is largest. Our finding aligns with the importance of field offices during the pandemic as discussed in the national media (e.g., Emanuel, 2021). Local networks consisting of various types of social connections through which people might learn about SSI were also particularly important—the percent declines in application and award rates were largest in counties with higher child SSI participation rates before the pandemic and in counties where more people had a disability. The pandemic disrupted existing networks through which people were previously likely to learn about SSI, leading to larger effects in counties that likely had stronger networks before the pandemic. Schools provide a particularly important network: in a companion paper, we explore the broader role of schools in child SSI applications, finding that areas with more school closures at the outset of the 2020–2021 school-year saw fewer child SSI applications in the months immediately following the closures (Levere et al., 2024). Finally, we present evidence that economic stabilization policies also contributed to declines: counties with a larger immediate drop in employment at the outset of the pandemic also experienced larger drops in applications. These latter findings stand in stark contrast to previous literature showing that participation in disability benefits increases with negative economic shocks (Maestas et al., 2021; Nichols et al., 2017; see Note 1 in Supplemental Material).

Our results help illuminate systemic issues related to accessing SSI benefits and to SSA's continued efforts around outreach to encourage take-up among eligible children who are not receiving benefits. These issues are important in understanding potential access issues, which are likely influenced by a combination of both SSA supports (e.g., field offices) and other regional factors (e.g., schools and other programs that might overlap with SSA). Understanding these factors can support SSA's efforts in more efficiently conducting outreach to areas with the greatest needs.

Child SSI Overview

To qualify for SSI, children must both be considered to have a disability and have sufficiently limited income and resources. Children must have a "marked and severe functional limitation" to be considered as having a disability for the purposes of qualifying for benefits, with the condition expected to last for at least 12 months or to result in death. Children with severe mental or physical health conditions can qualify for benefits. Income and resources for children are primarily based on those deemed from a parent or guardian onto the child. To qualify for SSI, a child's available resources must not exceed US$2,000, though some things like the value of a residential home are excluded from this limit.

Applying for SSI requires families to fill out forms and provide required documents. An applicant can provide the initial basic information online (see Note 2 in Supplemental Material). After that, the applicant must meet with an SSA representative either by phone or in a field office to complete the application process. This includes providing detailed documents or information on all finances, such as payroll slips and mortgage or lease details, as well as contact information for all doctors, hospitals, and clinics previously visited for health care.

After receiving a complete application, the local field office assesses if the applicant meets income and resource limits and, if so, forwards the case to the state's disability determination service (DDS). Those applicants who do not meet income and resource limits receive a technical denial and are not evaluated for their disability. For those who do meet income and resource limits, the next step is a formal evaluation of disability against the SSA criteria for eligibility. The state DDS considers information from all health providers in determining if the applicant meets the disability criteria. For children, the DDS also typically requests information from those involved in the child's day-to-day activities at school through a Teacher Questionnaire. This information allows the DDS to assess a child's functioning and whether/how the impairment affects his or her daily activities.

Denied applicants can appeal the decision, though the appeal process takes significant time, influencing our decision in this research on how to characterize awards. Appeals can occur at each of four successive levels: (a) reconsideration, (b) administrative law judge, (c) an Appeals Council, and (d) a Federal Court review. Appeals going through multiple levels can take several years to reach a final decision. As a result, many awards made during the pandemic are based on applications filed well before the pandemic. In addition, applications from the initial stages of the pandemic may not yet have a final decision.

Most child awardees have mental health conditions. In 2019, about 70% of new child awardees had a mental disorder (SSA, 2021). Most of these were based on autism spectrum disorders, developmental disorders, and child or adolescent disorders "not elsewhere classified" (which includes disorders such as attention deficit hyperactivity disorder).

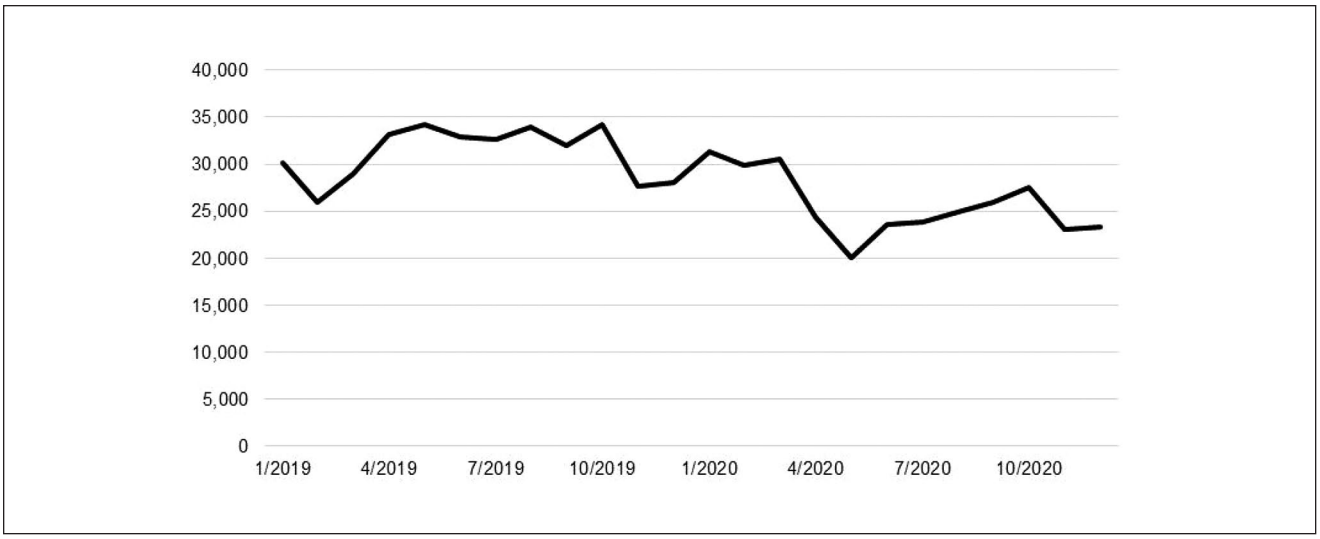

Figure 1. Monthly Child SSI Applications, 2019 to 2020.
Source. Authors' calculations using the Supplemental Security Record.

The COVID-19 Pandemic and SSI

During the pandemic, child SSI applications and awards declined dramatically, especially in the initial months. In 2020, child SSI applications declined by 17% and awards declined by 19%. Application declines were concentrated particularly in the first few months of the pandemic (see Figure 1). The decline in both applications and awards far exceeded the downward trend in child SSI participation that has been ongoing since at least 2013: whereas applications declined by 17% in 2020, the average annual decline from 2013 to 2019 was approximately 4% (SSA, 2021). Applications and awards continued to decline in 2021, albeit at a slower rate: applications fell by an additional 10% and awards by an additional 15%. Changes in child SSI participation during this time varied by geography—as discussed below, 32% of counties representing 18% of the U.S. population experienced declines of more than 40%, whereas 22% of counties representing 9% of the U.S. population experienced *increases* in applications. This geographic variation is consistent with much prior research highlighting geographic variation in child SSI participation (e.g., Levere et al., 2022; Schmidt & Sevak, 2017).

The severe reduction in access to field offices in March 2020 made it more difficult for some people to apply for SSI. Research by Deshpande and Li (2019) found that field office closures led to fewer applications for disability benefits in the catchment areas near the field office. Prior to the pandemic, a person could in most areas apply for SSI without an appointment by entering an SSA field office. Having physical offices may have been especially helpful for those lacking internet access or who faced difficulties in completing the initial steps in the application process online. Field offices did not fully reopen for all in-person services until April 2022, though appointments for many services (including applications for SSI) were available before then.

Another factor that potentially limited SSI participation was the availability of direct cash payments through the CARES Act. Through this act, Congress passed economic stabilization policies that affected many families' overall financial well-being and thus the ability to meet resource limits necessary to qualify for SSI or their perceived need for SSI. Specifically, it provided economic impact payments of US$1,200 per adult and US$500 per child to over 90% of households (Holtzblatt, 2020), as well as US$600 weekly supplemental unemployment insurance payments. These payments together were highly effective in minimizing the disruption to households' financial situation (Larrimore et al., 2022). Although these payments were not counted toward SSI income and resource limits (see Note 3 in Supplemental Material), they could still lead to lower child SSI applications and awards. For households with low income and resources, these payments provided a substantial source of income: in contrast to other types of tax credits or benefits, these payments were a fixed dollar amount rather than based on income or taxes owed. The economic impact payments were often provided automatically (see Note 4 in Supplemental Material), whereas applications to government benefit programs like SSI can entail administrative burdens (e.g., Herd, 2015). Unemployment benefits required people to actively claim benefits, and did not necessarily increase income in the same way that economic impact payments did. Historically, only about half of eligible people claim unemployment insurance (Lachowska et al., 2022), though that share may have differed with the salience of unemployment claiming during the pandemic.

These greater resources might have made it less worthwhile for families to go through the SSI application process.

The virus itself may have directly and indirectly influenced children's physical and mental health, in turn affecting whether they are considered to have a disability. Children mostly evaded the most significant consequences of the virus, with the lowest death rates of any age group: as of July 2022, children accounted for 0.1% of COVID-19 deaths in the United States despite comprising 22% of the population. Yet some still faced debilitating effects; about 25% of children with COVID had long COVID symptoms, including 6% that had cognitive symptoms such as inability to concentrate, learning difficulties, or memory loss (Lopez-Leon et al., 2022). Many children also faced adverse mental health consequences, often related to stressors associated with the pandemic, including school closures (Mayne et al., 2021; Viner et al., 2022). These stressors may have exacerbated cognitive, developmental, and physical issues that influence a child's health, and thus potentially increase eligibility for SSI if they apply.

Finally, the disruptions to all facets of everyday life may also have weakened existing networks through which people learned about and applied for SSI. For example, schools might have been an important channel through which families learned about SSI. But all public schools eliminated in-person learning by the end of the 2019–2020 school-year, potentially making it harder for families to learn about the program (on top of the other disruptions school closures caused). With government policies requiring people to shelter in place for extended periods of time, many other formal and informal networks ceased operating. To the extent that these networks previously played a role in informing families about SSI, the disruption may have contributed to the declining applications and awards.

All of these factors that potentially influence SSI applications and awards may also have varied by geography: for example, stabilization policies likely would have a bigger impact in places that were more severely economically affected, whereas limited access to field offices likely would have had the largest impact in places with easy access, where the change in service availability was most pronounced. Our analysis exploits this geographic variation to identify places that had larger (or smaller) changes in SSI applications and awards.

Method

We collected counts of child SSI applications and awards at the county-month level from the Supplemental Security Record, the primary data system SSA uses for SSI. We assigned applications to the month in which the application was filed and awards to the month in which the award occurred (see Note 5 in Supplemental Material). Our analysis focuses on applications and awards during 2019 and 2020. Within each county, we scale the number of child applications or awards in each month by the county's child population in that year (available from the U.S. Census).

Our primary outcomes capture the percent change in applications or awards in a county over the 6-month window in 2020 when the national decline in applications or awards was largest. As discussed below, our primary analysis uses one observation per county, meaning that we must distill patterns in each county into a single number. We therefore calculated the percent change in cumulative applications and awards over each 6-month period in 2020 compared with the same 6-month period in 2019 (see Note 6 in Supplemental Material).

The decline in applications was largest for the 6-month window starting in April 2020, whereas the decline in awards was largest for the 6-month window starting in July 2020 (see Figure 2). Cumulative applications from April to September 2020 declined by nearly 30% relative to the same months in 2019. Cumulative awards from July to December 2020 declined by about 33% relative to the same months in 2019. Our primary outcome measures therefore characterize each county by the percent change in applications or awards over these months.

We also rely on several external data sources to construct an array of variables that we correlate with the local-level decline in SSI participation (Supplemental Exhibit 1). We calculate socioeconomic and demographic characteristics at the county level from American Community Survey (ACS) 5-year estimates in 2015–2019. Information on several aspects of the SSI program—including local-level participation in 2019 and field office locations—comes from SSA administrative records. We use the Bureau of Labor Statistics (BLS) local area estimates to characterize the change in economic conditions during the pandemic, focusing on the percentage decline in the number of people employed from March to April 2020 (see Note 7 in Supplemental Material). We also collected data from Johns Hopkins University on the severity of the pandemic measured as cases and deaths.

Our regression model correlates the county-level change in applications or awards with several control variables (see Equation 1). The primary outcome, $SSI\ decline_c$, captures the county-level change in applications or awards over the relevant 6-month period. X_c includes several county-level characteristics: (a) an indicator for having an SSA field office in the county; (b) distance to the nearest SSA field office (set to zero if the county has a field office); (c) the child SSI participation rate; (d) the percentage of the county population that is Black, Hispanic, female, has a disability, or is in poverty; (e) social capital; (f) urbanicity (metropolitan, suburban or urban); (g) COVID-19 cases per capita; (h) COVID-19 deaths per capita; (i) the decline in employment from March to April 2020; and (j) the percentage of students in special education in the county. Our estimates

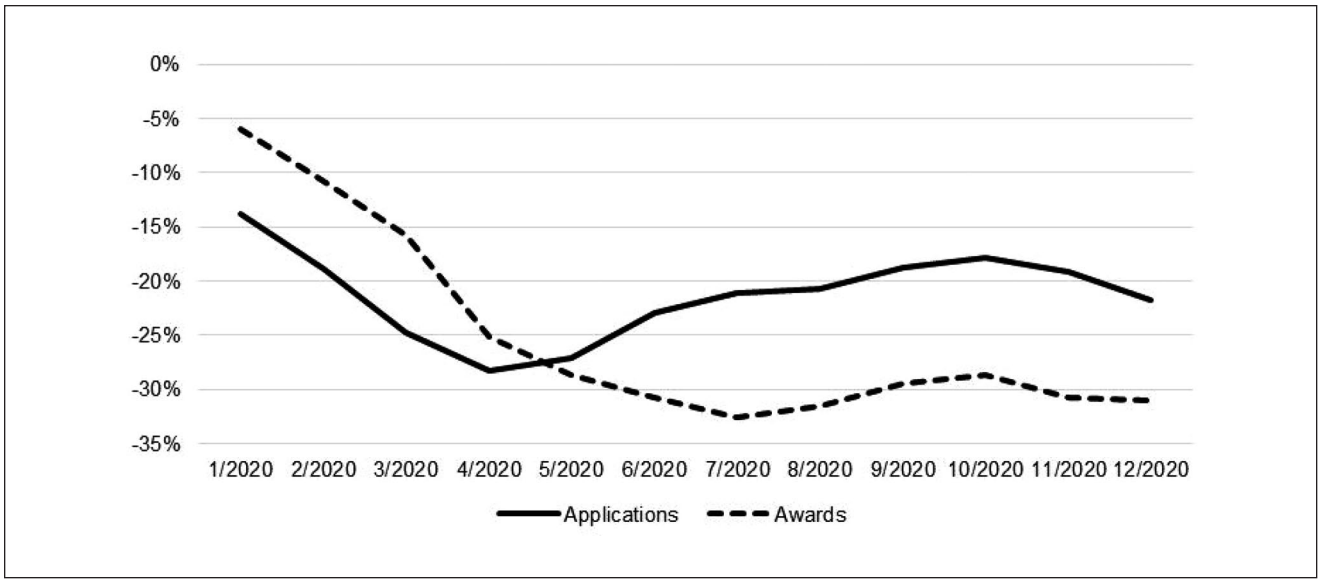

Figure 2. Percent Change in SSI Applications and Awards Over 6-Month Period Starting Each Month of 2020.
Source. Authors' calculations.
Note. Calculates the percent change in applications and awards over each month and the subsequent 5 months relative to the same calendar months in 2019. See Note 8 in Supplemental Material for full details.

therefore reflect the marginal contribution of each characteristic holding all the other characteristics fixed.

In supplemental materials, we also include the results of an alternative specification that runs a separate regression for each control variable. This alternative specification therefore avoids correlations between factors, but also means that the same underlying factor may contribute to a significant estimate in several different equations (because there is more potential for omitted variable bias).

We weight the regressions by county child population in 2020 to ensure the results are not heavily influenced by small counties and instead reflect the changes for the average person. Finally, to facilitate comparisons of the relative magnitude of the correlations with each control variable, we report standardized coefficients:

$$SSI\ decline_c = \alpha + \beta X_c + \varepsilon_c \quad (1)$$

We estimated two primary variants of the model from Equation 1. First, we top coded the change in applications and awards at the 99th percentile. When applications or awards decline, they can fall no more than 100% (in which case they would decline to zero). Yet the increase in applications or awards is unbounded, leading to some large outliers in smaller counties that had few applications or awards in 2019. By top coding these extreme values to the 99th percentile, we ensure our results are not influenced by these outliers. Second, we add state fixed effects (see Equation 2). Models with state fixed effects allow us to compare patterns entirely across the counties within a state, averaging the correlation between each characteristic and applications or awards across all the states:

$$SSI\ decline_c = \gamma + \delta X_c + \theta_s + \omega_c \quad (2)$$

Results

The change in cumulative child SSI applications from April to September 2020 relative to April to September 2019 varied widely across the country (see Figure 3, Panel A). As shown in Figure 2, the national decline during this time was 28%. Yet this general decline masks substantial geographic heterogeneity in the change in child SSI applications: 32% of counties representing 18% of the U.S. population experienced declines of more than 40%, whereas 22% of counties representing 9% of the U.S. population experienced *increases* in applications (see Supplemental Exhibits 2 to 4, which provide more comprehensive statistics on the geographic patterns in applications and awards). No clear geographic pattern emerges: large declines and increases are spread throughout the country. The change in awards, focusing on the period from July to December 2020 relative to July to December 2019, is similar: the substantial geographic heterogeneity has no clearly visible patterns explaining which areas had larger or smaller declines (see Figure 3, Panel B). We next turn to exploring the different factors that correlate with these county-level application and awards trends.

Counties with field offices experienced substantially larger declines in child SSI applications than counties

Figure 3. Geographic Variation in Decline in Child SSI Participation. Panel A. Applications. Panel B. Awards.
Note. Panel A shows the percent change in total applications from April 2020-September 2020 relative to April 2019-September 2019. Panel B shows the percent change in total awards from July 2020-December 2020 relative to July 2019-December 2019.

without them (see Table 1, Row 1). Regardless of model specification, this predictor consistently has one of the highest magnitudes of standardized coefficient and is statistically significant. These findings are consistent with past research that field office closures lead to fewer applications (Deshpande & Li, 2019). Although access to SSA field offices was substantially reduced, the change in service availability was strongest in counties that had a field office. Counties that were relatively far from a field office already had limited ability to access in-person services at field offices before the pandemic. For counties without a field office, distance to the nearest field office is a less reliable predictor (see Table 1, Row 2): the coefficient is not significant in our preferred specification that includes state fixed effects (Column 3), and the magnitude is much smaller than that on the field office in county indicator regardless of specification. In a sensitivity check that only includes the distance to nearest field office (set to zero for counties with

Table 1. Relationship Between Declines in SSI Applications and Awards and Local Characteristics.

	Applications						Awards					
	(1)		(2)		(3)		(4)		(5)		(6)	
Characteristic	Std. coeff.	*p*-value	Std. coeff.	*p*-value	Std. coeff.	*p*-value	Std. coeff.	*p*-value	Std. coeff	*p*-value	Std. coeff	*p*-value
1. Field office in county	-0.170	0.000	-0.186	0.000	-0.136	0.000	-0.114	0.000	-0.125	0.000	-0.086	0.007
2. Dist. to nearest field office (if outside county)	-0.046	0.056	-0.057	0.023	-0.023	0.362	-0.019	0.469	-0.021	0.447	-0.013	0.651
3. Child SSI participation rate	-0.196	0.000	-0.212	0.000	-0.077	0.088	-0.150	0.000	-0.164	0.000	-0.075	0.070
% of population that												
4. is Black	0.018	0.514	0.015	0.597	-0.055	0.178	0.024	0.341	0.023	0.413	-0.017	0.642
5. is Hispanic	0.055	0.172	0.055	0.207	0.013	0.835	-0.067	0.041	-0.079	0.029	-0.005	0.910
6. is Female	0.027	0.264	0.038	0.084	-0.011	0.603	0.018	0.391	0.027	0.233	-0.016	0.486
7. has a disability	-0.072	0.028	-0.077	0.029	-0.104	0.004	-0.007	0.812	-0.006	0.851	0.003	0.927
8. is in poverty	0.066	0.091	0.069	0.100	-0.028	0.542	0.070	0.087	0.081	0.068	-0.003	0.955
Urbanicity (omitted: suburban)												
9. Rural	0.023	0.219	0.012	0.508	0.016	0.370	-0.017	0.373	-0.031	0.070	-0.031	0.071
10. Metropolitan	-0.073	0.002	-0.080	0.002	-0.068	0.002	-0.084	0.001	-0.083	0.002	-0.074	0.004
11. Social capital	-0.016	0.579	-0.025	0.434	0.036	0.219	0.014	0.552	0.010	0.697	0.038	0.172
12. COVID-19 cases per capita	0.028	0.348	0.038	0.248	-0.040	0.271	0.073	0.005	0.085	0.003	-0.004	0.915
13. COVID-19 deaths per capita	-0.156	0.000	-0.176	0.000	-0.016	0.708	-0.061	0.008	-0.071	0.005	-0.002	0.957
14. Change in employment in April 2020	-0.042	0.091	-0.049	0.072	-0.048	0.201	-0.020	0.377	-0.027	0.288	-0.040	0.347
15. % in special ed.	-0.011	0.693	-0.012	0.675	0.059	0.017	-0.010	0.650	-0.012	0.623	0.016	0.586
Top-coded at 99%			X		X				X		X	
State fixed effects					X						X	

Source. Authors' calculations using SSA program records, ACS data, USDA Rural-Urban Continuum Codes, U.S. Gazetteer Files, Rupasingha et al. (2006), Johns Hopkins data, BLS data, and CRDC data.

Note. For applications, the outcome variable captures the percent change in cumulative applications between April and September 2020 relative to applications from April to September 2019, measured at the county level. For awards, the outcome variable captures the percent change in cumulative awards between July and December 2020 relative to awards from July to December 2019, measured at the county level. Columns 1, 2, 4, and 5 estimate the model in Equation 1 while Columns 3 and 6 estimate the model in Equation 2.

a field office in it), results continue to indicate that declines were concentrated in counties close to field offices (Supplemental Exhibit 5).

The child SSI participation rate before the pandemic is negatively correlated with the percent change in child SSI applications (see Table 1, Row 3). One potential explanation relates to networks: areas with high participation rates may have traditionally relied on networks to spread information about SSI, and the pandemic disrupted these networks through substantial reductions in the movement of people, particularly in the spring and summer of 2020, both because of fear of the virus and state and local lockdown policies (Weill et al., 2020). Reduced mobility and interaction may have made it more difficult to learn about SSI from existing participants. In places that already had relatively low participation, there were presumably fewer opportunities to learn about the program from existing participants before the pandemic. In these places, the reduced mobility and interactions would lead to a smaller change in those opportunities during the pandemic, indicating a potentially smaller decline in applications. An alternative explanation is reversion to the mean—counties that had high rates of participation presumably had high rates of applications in the past. Importantly, though the coefficient is significant in all specifications, the magnitude falls by about two-thirds with the inclusion of state fixed effects. The difference in results across specifications indicates that a substantive part of this relationship is driven by cross-state variation in child SSI participation (see Note 8 in Supplemental Material).

County composition of race, ethnicity, gender, and socioeconomic status was not associated with the change in applications, though counties with more people with disabilities experienced larger declines in child SSI applications (see Table 1, Rows 4–8). The lack of a significant relationship may stem from collinearity between measures included in our regression model: for example, counties with a higher share of Black population had higher SSI participation rates before the pandemic (see Note 9 in Supplemental Material). Thus, race could potentially operate through other channels as well. In models that include each covariate separately, counties with higher shares of people who are Black, Hispanic, female, or in poverty all saw significantly larger declines in applications (Supplemental Exhibit 6). This indicates that counties with more Black residents saw larger declines in child SSI applications, but likely did so because they tend to have higher SSI participation, and high SSI participation was correlated

with declines in applications. Similar to the suppositions about networks for child SSI participation, networks may also play a role in why the share of people with disabilities is negatively associated with the change in applications (see Table 1, Row 7). Even apart from SSI participation, having more people with disabilities in the area might offer greater networking opportunities to learn about general services available for people with disabilities, which in turn might lead more people to ultimately learn about SSI (see Note 10 in Supplemental Material). Pandemic-related shutdowns likely disrupted these preexisting informal networks, which presumably would have been stronger in places with more people with disabilities. It is noteworthy that while the share of the population living in poverty is a strong predictor of SSI participation (Levere et al., 2022), it does not appear related to the *change* in applications during the pandemic once controlling for state fixed effects (see Table 1, Row 8).

Metropolitan areas had larger declines in child SSI applications than either suburban or rural counties (see Table 1, Rows 9–10). The early stages of the pandemic were, for the most part, most severe in the urban areas through which COVID-19 likely entered the United States from abroad—places like New York City and Seattle. These urban areas tended to have greater restrictions from the local government and more limits to movement, thus weakening networks, relative to rural areas (Jay et al., 2020). Thus, the role of networks again emerges as a potentially important contributing factor to the larger declines in applications in metropolitan areas.

The severity of the pandemic, as measured by COVID-19 cases and deaths per capita from March to August 2020, does not influence child SSI applications in our preferred specification that includes state fixed effects (see Table 1, Rows 12–13). When we vary the months over which we measure COVID-19 cases and deaths to more directly align with the period the outcome is measured in (rather than the first months of the pandemic, as in our main specification), the results are essentially unchanged (Supplemental Exhibit 7). When allowing for cross-state variation, COVID-19 deaths per capita are negatively correlated with the change in applications, indicating areas with more severe effects of the pandemic had larger declines in child SSI applications. Yet these differences primarily stem from cross-state differences in death rates: once state fixed effects are included in Column 3, this relationship is no longer significant. State fixed effects control for things like the state's policy response to the pandemic, as well as state-level differences in population characteristics, such as those particularly at risk.

Areas that experienced larger economic shocks in terms of larger employment declines between March and April 2020 also had slightly larger declines in child SSI applications (see Table 1, Row 14). However, this finding contrasts with the existing literature, which has typically found that participation in disability benefits increases as the economy worsens (e.g., Maestas et al., 2021). Places with greater economic disruptions, particularly as measured by the percent change in employment from March to April 2020, may have had more people qualify for the US$600 per week supplemental unemployment insurance benefits. People may not have understood that these payments did not count toward the resource limit: the SSI rules already include several complex provisions, such as the Student Earned Income Exclusion, that may make it challenging for people to broadly understand precisely how income influences benefit payments. Although these payments did not directly count as income and resources, the generosity of these payments combined with the fungibility of money may have led more people in these areas to exceed resource limits deriving from other sources, thus reducing applications.

Counties with more students in special education had smaller declines in child SSI applications (see Table 1, Row 15). In the first two columns that do not include state fixed effects, the relationship is not significant. Including state fixed effects, however, makes the coefficient positive and significant. One potential explanation for this finding is that the pandemic had differing effects on the SSI participation of those already in the special education network compared with those not yet in the network. Where more students receive special education, a newly SSI-eligible child (perhaps because a parent of a student with a disability lost their job) might be more likely to have access to both a disability diagnosis and information about SSI. In contrast, where there are fewer students receiving special education, a newly SSI-eligible child might not have the information necessary to either know about SSI or support an application. As a result, the larger-network areas (i.e., more students receiving special education) could experience smaller initial declines in applications. This advantage would be likely to dissipate by the following school year, as students have more time to obtain diagnoses and potentially enter the network (and the benefits for in-network students have been utilized and there were fewer economic shocks).

Results for awards are mostly similar to the results for applications, though a few notable exceptions emerge (see Table 1, Columns 4–6). First, COVID-19 cases per capita are positively correlated with the change in awards when the model excludes state fixed effects, meaning that counties with more cases had smaller declines in awards. The smaller decline may be a function of the debilitating conditions stemming from COVID-19 leading more people to qualify for benefits. However, we find that this positive relationship goes away once we include state fixed effects and only make within-state comparisons (results remain insignificant when we measure COVID-19 cases and deaths in the months more directly aligned with awards;

Supplemental Exhibit 7). The percentage of Hispanic residents is also significantly negatively correlated with awards when state fixed effects are excluded. However, in our preferred specification with state fixed effects it remains not significant and small in magnitude.

Discussion

We find that though child SSI applications and awards declined substantially at the outset of the pandemic, the decline was not uniform across the country. Considering the period from April to September 2020, the 6 months in which the application decline was largest, about 9% of people lived in counties where applications increased and about 18% of people lived in counties where the decline was more than 40%. These patterns are consistent with other research that has shown meaningful geographic heterogeneity in SSI participation trends over the past decade (Levere et al., 2022; Schmidt & Sevak, 2017).

The socioeconomic and demographic factors that vary by geography and are associated with changes in child SSI participation during this time highlight three particularly important forces that likely contributed to the declines. First, the severe restriction in SSA field office access in March 2020 almost certainly made it harder for people to complete the application process. These effects were seen most strongly in counties with a field office, where the pandemic had the largest impact on service availability. Second, the pandemic disrupted networks people may have previously relied on to learn about child SSI or to identify qualifying disabilities. Third, economic stabilization policies, which helped families avoid financial catastrophe despite the largest increases in unemployment since the Great Depression, may have also led some people to find it no longer worthwhile to apply.

The findings highlight the role of administrative burdens in the application process for benefit programs. The loss of field office access made it particularly burdensome for people to complete the SSI application. This burden was disproportionately felt in places where it had previously been easier to visit a nearby field office. These findings are consistent with previous research on the hassles associated with field office closures (Deshpande & Li, 2019). The findings also contribute to a broader literature on how administrative burden in public programs can reduce participation more broadly: things like program complexity, limited awareness, and demands on time (Bhargava & Manoli, 2015; Chetty et al., 2013; Homonoff & Somerville, 2021). In addition, even though SSA did not consider the income received from economic impact payments and supplemental unemployment insurance benefits in determining financial eligibility for SSI, applications still declined during this period. One plausible hypothesis is that with the additional income, families no longer found it worthwhile to go through the application process, potentially because the application process (and ongoing eligibility processes) entails administrative burdens. Families might also not have understood that the payments did not affect their eligibility.

One option to address the substantial declines in participation for which this article provides some evidence, particularly with respect to variations by geographic areas, is making the general SSI application process easier to navigate, potentially through the ability to apply online. This idea aligns with the Organization for Economic Cooperation and Development (2020) recommendation that governments "use digital tools to deliver social services," thus better reaching vulnerable groups. Offering the ability to apply online for SSDI led to increases in application, underscoring its potential for SSI applications (Foote et al., 2019). Offering the ability to apply online could be especially important because not all counties have SSA field offices. Hence, this could expand both equitable and efficient options for gathering applications that might address some of the disparities shown in this article.

Another policy option this article provides evidence related to is using data-driven approaches to identify who to partner with when conducting outreach to those eligible for benefits, like partnering with local organizations such as schools, and to better target such outreach opportunities. One of SSA's recent agency priority goals was to increase SSI application rates specifically from historically underserved communities, increasing program equity. SSA defined underserved as areas where applications declined by more than 30% between 2019 and 2021 and where the majority of people were either (a) people of color; or (b) people living at or below 150% of the Federal Poverty Threshold. Our results indicating that families likely learned about the child SSI program through existing networks, such as current SSI recipients or organizations that serve people with disabilities, point to potential ways to achieve SSA's agency priority goal. For example, partnering with community organizations and other trusted local entities could promote awareness of the program among low-income families and to assist them in the application process. Schools represent a particularly important potential partner: in a separate paper, we show that school closures during the 2020–2021 school-year can explain a meaningful share of the declines in applications during that time period (Levere et al., 2024). SSA established the Vulnerable Population Liaisons staff position to work with local organizations to help potentially eligible people apply for benefits. Our analysis has implications for these efforts, such as helping identify local areas and the characteristics of organizations with whom these Vulnerable Population Liaisons might most effectively establish partnerships.

Limitations

There are some important caveats to interpreting our results. First, our study focuses only on the early period of the COVID-19 pandemic. The COVID-19 public health emergency was not formally declared over until May 11, 2023. Our analysis only covers changes in applications and awards during 2020. National child SSI applications declined by 17% in 2020 and an additional 10% in 2021 before increasing by 17% in 2022. Yet applications in 2022 remained 12% lower than they were in 2019. Second, our regression analysis only represents correlations, not causality. Because there is not random variation in the underlying control variables, we cannot identify what would have happened to applications or awards if the value of specific control variables changed. Other unobserved factors may also contribute to the findings. Regardless, our findings provide important new evidence about the role of networks during the COVID-19 pandemic in affecting child SSI participation.

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